Yucaipa Valley Water District

Notice and Agenda of a Board Workshop

Tuesday, October 30, 2018 at 4:00 p.m.

MEETING LOCATION:	District Administration Building 12770 Second Street, Yucaipa
MEMBERS OF THE BOARD:	Director Chris Mann, Division 1 Director Bruce Granlund, Division 2 Director Jay Bogh, Division 3 Director Lonni Granlund, Division 4 Director Tom Shalhoub, Division 5

I. Call to Order

II. Public Comments At this time, members of the public may address the Board of Directors on matters within its jurisdiction; however, no action or significant discussion may take place on any item not on the meeting agenda.

III. Staff Report

IV. Presentations

A. Overview of Yucaipa Valley Water District's Participation in the Great California ShakeOut Event [Workshop Memorandum No. 18-240 - Page 9 of 56]

B. Overview of a Proposal to Conduct Pilot Recharge Testing to Evaluate the Long-Term Infiltration Rates in the Beaumont Basin [Workshop Memorandum No. 18-241 - Page 10 of 56]

V. Operational Updates

A. Overview of the Proposed Roadway Improvements to Mountain View Lane, Yucaipa [Workshop Memorandum No. 18-242 - Page 24 of 56]

B. Overview of Proposed Sewer Mainline Repairs in Wildwood Creek, Yucaipa [Workshop Memorandum No. 18-243 - Page 28 of 56]

VI. Administrative Items

A. Consideration of Approving Anticipated Reimbursable Expenses for Board Member Participation at the Association of California Water Agencies Conference [Workshop Memorandum No. 18-244 - Page 35 of 56]

VII. Director Comments

Any person who requires accommodation to participate in this meeting should contact the District office at (909) 797-5117, at least 48 hours prior to the meeting to request a disability-related modification or accommodation.

Materials that are provided to the Board of Directors after the meeting packet is compiled and distributed will be made available for public review during normal business hours at the District office located at 12770 Second Street, Yucaipa. Meeting materials are also available on the District's website at www.yvwd.dst.ca.us

VIII. Announcements

A. November 6, 2018 at 6:00 p.m. - Regular Board Meeting - TENTATIVE
B. November 13, 2018 at 4:00 p.m. - Board Workshop
C. November 20, 2018 at 6:00 p.m. - Regular Board Meeting
D. November 27, 2018 at 4:00 p.m. - Board Workshop
E. December 4, 2018 at 6:00 p.m. - Regular Board Meeting
F. December 11, 2018 at 4:00 p.m. - Board Workshop
G. December 18, 2018 at 6:00 p.m. - Regular Board Meeting
H. ~~December 25, 2018 at 4:00 p.m. - Board Workshop~~ Canceled
I. ~~January 1, 2019 at 6:00 p.m. - Regular Board Meeting~~ Canceled
J. January 8, 2019 at 4:00 p.m. - Board Workshop
K. January 15, 2019 at 6:00 p.m. - Regular Board Meeting
L. January 29, 2019 at 4:00 p.m. - Board Workshop

IX. Closed Session

A. Conference with Real Property Negotiator(s) - Government Code 54956.8
Property: Assessor's Parcel Numbers: 413-380-001 - 009, and 013
Agency Negotiator: Joseph Zoba, General Manager
Negotiating Parties: Johnson Brothers Partnership
Under Negotiation: Terms of Payment and Price

B. Conference with Real Property Negotiator(s) - Government Code 54956.8
Property: Assessor's Parcel Number(s): 294-121-24, 25 / 473-020-006, 008, 029, 043
Agency Negotiator: Joseph Zoba, General Manager
Negotiating Parties: Joanna Averett
Under Negotiation: Terms of Payment and Price

C. Conference with Legal Counsel--Existing Litigation - Government Code 54956.9(d)
YVWD vs Hillcrest Mobile Home Park
San Bernardino Superior Court Case No. CIVDS 1808441

X. Adjournment

Staff Report

Yucaipa Valley Water District

News Deeply
WATER DEEPLY

Why California Law Requires a Clear Benefit for Groundwater Recharge

Aquifer recharge by itself isn't enough to win a water diversion permit in California, says Erik Ekdahl of the State Water Resources Control Board. A more specific benefit is required, and the board is working to ease the process.

WRITTEN BY	PUBLISHED ONσ	READ TIME
Matt Weiser	October 18, 2018	Approx. 5 minutes

Researchers found that removing a section of old levee on the Cosumnes River Preserve in California appreciably restocked groundwater aquifers. State law requires a specific benefit to come out of such recharge efforts before granting a water diversion permit. Scientists on the project included, from left, Drew Nichols of U.C. Davis; Christina Bradley, U.C. Merced; Carson Jeffres, U.C. Davis; and Marilyn Fogel, U.C. Merced. Photo courtesy UC Merced

RESEARCHERS AT THE University of California recently highlighted a flaw in state law that may prohibit diverting streamflow to recharge groundwater. The problem is that groundwater recharge by itself is not considered a "beneficial use" under state law, and meeting that definition is a requirement to obtain a permit to divert water.

Officials at the State Water Resources Control Board, which oversees water rights, say the reality is not so clear-cut. In fact, existing rules allow most groundwater recharge projects to obtain a water right. It's just that they may not be awarded that right for the act of recharge by itself. The applicant would have to specifically target some ancillary benefit of recharge, such as salinity control in an aquifer or reversing land subsidence caused by overpumping groundwater.

The U.C. researchers, among other things, recommended that the water board develop new regulations to clarify that those kinds of nonextractive uses of groundwater are, in fact, a beneficial use. But the water board has no plans to do so, asserting that existing rules are adequate.

Photo courtesy California Water Resources Control Board

To explain all this further, Water Deeply recently spoke with Erik Ekdahl, a deputy director in the division of water rights at the state board.
Photo courtesy California Water Resources Control Board

Water Deeply: Why isn't the water board changing the rules to make groundwater recharge a beneficial use?

Erik Ekdahl: Two main reasons. The first is that it leads to trouble and potential "cold storage," for lack of a better term, related to junior water-right holders and senior water-right holders.

If you start making groundwater recharge a beneficial use, what that does is it allows senior water-right holders to start placing vast amounts of water into aquifer storage that downstream junior water-right holders essentially no longer have access to. It really messes up the order of things, including how much people pay for water.

Let's say you have a very senior water-right holder and they have a license for maybe 1,000 acre-feet a year. Yet they're only able to actually use 300 a year, because that's how much they need for their crops. So they have a right to 700 additional acre-feet, but no place to use it.

Upon making groundwater recharge a beneficial use, what you basically allow that senior water-right holder to do is put that extra 700 acre-feet into storage. They can lock that up and keep it underground, and they don't have to do anything with it. Then all the downstream users don't have access to it. So something a junior water-right holder might have been getting very cheaply, they suddenly might have to pay a couple hundred dollars an acre-foot or more to get. It reduces the amount of water that might be available, and it changes the cost structure.

Water Deeply: And what's the second reason?

Ekdahl: The second is that you don't really need to. I think that's the more important one.

There seems to be the mistaken belief among a lot of water-right users that if you just made groundwater recharge a beneficial use then it would be really easy to get a groundwater storage permit. Yet that's not really the case. It doesn't address the things that really fundamentally drive the water-right permitting process – which are whether or not they have done an environmental review and whether or not there is actually water available, as well as the effects on downstream water users and the environment. We still have to address all of those things. So simply making groundwater recharge a beneficial use doesn't avoid those issues that take a long time to address.

The other element of this is that when you really look at what people want to use groundwater storage for, we already include those as beneficial uses. Typically, it's because they want to use it for their irrigation or municipal supply later on. That's already a beneficial use. You don't need to create a new type of beneficial use to account for that.

Other issues include what we might call "in situ" beneficial uses, or nonextractive uses. This could include recharging groundwater as a seawater barrier, protection from land subsidence or protecting instream flows. Pollution control could be a beneficial use. Those are all beneficial uses, as well. In fact we have permitted those types of things in the past. The storage itself doesn't fundamentally affect the aquifer. It's what use comes out of it after that's fundamentally important.

Water Deeply: What about the goal of achieving sustainability in an aquifer, as required by the Sustainable Groundwater Management Act. Is that a beneficial use?

Ekdahl: It could be. I would take a slightly more skeptical view of this idea that we need to recharge an aquifer just to meet that definition in the SGMA. Why are you trying to reach some water level in the aquifer? It's almost certainly going to be for a number of reasons: That's the level at which most of your private domestic or municipal wells are at [or] at which subsidence no longer occurs – or to repel salinity. There are all these other issues that would actually drive the need to raise the aquifer level to some point. And those would all be beneficial uses.

The other idea that I think merits a little bit of skepticism is this: If we're going to raise the level in an aquifer, how realistic is that for most of these SGMA basins? I think that's a pretty unrealistic goal for many basins. I think what we're going to see in most SGMA plans is some kind of slow ramp-down to a level that's lower than what we see today. I think it's going to be really tough to raise groundwater levels in many of these aquifers without massive, massive changes in pumping rates or water application, or through recharge efforts. The mass balances just don't work out otherwise.

Water Deeply: So if the water board has no plans to change the regulations on beneficial use, what is it doing to encourage more groundwater recharge?

Ekdahl: We are working internally to find ways to give better direction to stakeholders and do better outreach. We've added information to our website that clarifies examples of in situ uses, and also clarifies that you can use groundwater recharge to mitigate subsidence, support groundwater-dependent ecosystems, protect or enhance groundwater levels. We directly say this on our website now.

We're going to look in the next couple of months to further clarify nonextractive beneficial uses, and how an applicant might go about applying for a permit. The messaging and communication on that is maybe still a little bit unclear on our end. We do want to work on providing more information to applicants. Maybe it's more FAQs on our website; maybe it's more outreach events. But we are working toward it.

We think we can permit and accommodate almost any kind of reasonable application that comes to us. We do encourage people to give us a call in advance and talk through why they are trying to recharge groundwater. We'll tell them about all the different kinds of beneficial uses we can permit, and would be interested in working with the applicant to do so.

But I don't want to make it sound like it's going to be like buying a ticket at the fair and getting your water right. It's still going to be a complex process. You still need to complete the California Environmental Quality Act process, go through a public notification process – and you're likely to get protests, because most water-right applications do. We want these environmental protections in place to make sure we're preserving instream flows for the environment or to protect senior water-right holders downstream.

Source: https://www.newsdeeply.com/water/community/2018/10/18/why-california-law-requires-a-clear-benefit-for-groundwater-recharge

Additional Links:

Water Deeply website - https://www.newsdeeply.com/water

Register for a Water Deeply - https://www.newsdeeply.com/register/sign-up

Presentations

Yucaipa Valley Water District

Yucaipa Valley Water District

Workshop Memorandum 18-240

Date: October 30, 2018

Prepared By: Jennifer Ares, Water Resource Manager
Matt Porras, Public Works Supervisor

Subject: Overview of Yucaipa Valley Water District's Participation in the Great California ShakeOut Event

---

On October 18, 2018, the Yucaipa Valley Water District employees participated in the Great California ShakeOut in partnership with the City of Yucaipa and the Calimesa Fire Department. Participating annually in the exercise is a great way for the District staff to prepare for big earthquakes whether at home or at work.

District staff has also increased emergency training through Incident Command System classes, Community Emergency Response Team training with the City of Yucaipa, and many staff have obtained their Amateur Radio License. Emergency preparedness allows the District to efficiently respond to local disasters ensuring the community receives safe and reliable drinking water as quickly as possible.

Yucaipa Valley Water District

Workshop Memorandum 18-241

Date: October 30, 2018

From: Joseph Zoba, General Manager

Subject: Overview of a Proposal to Conduct Pilot Recharge Testing to Evaluate the Long-Term Infiltration Rates in the Beaumont Basin

Like most water agencies in the arid southwest, the Yucaipa Valley Water District is confronted with increased drinking water demands due to the increased population and limited local water supplies. The Yucaipa Valley Water District is somewhat unique given the strict regulatory requirements that necessitate desalination of recycled water supplies to protect local groundwater basins pursuant to the 2004 Regional Water Quality Control Basin Plan for the Santa Ana Region.

To address a wide range of regional issues, the District has developed the Yucaipa Valley Regional Water Supply Renewal Project to accomplish the following objectives:

REGIONAL BENEFITS:

- Provides the Yucaipa Valley with a renewable water resource that will be a reliable water supply in the upper Santa Ana Watershed.
- Protects and enhances the regional groundwater quality by exporting concentrated salt brine that would normally accumulate through typical water use.
- Reduces the critical overdraft of the Yucaipa, Beaumont, and San Timoteo basins by reducing the fresh water production from the local groundwater supplies.
- Encourages economic and environmental growth of the region by balancing water demands.

WATERSHED BENEFITS:

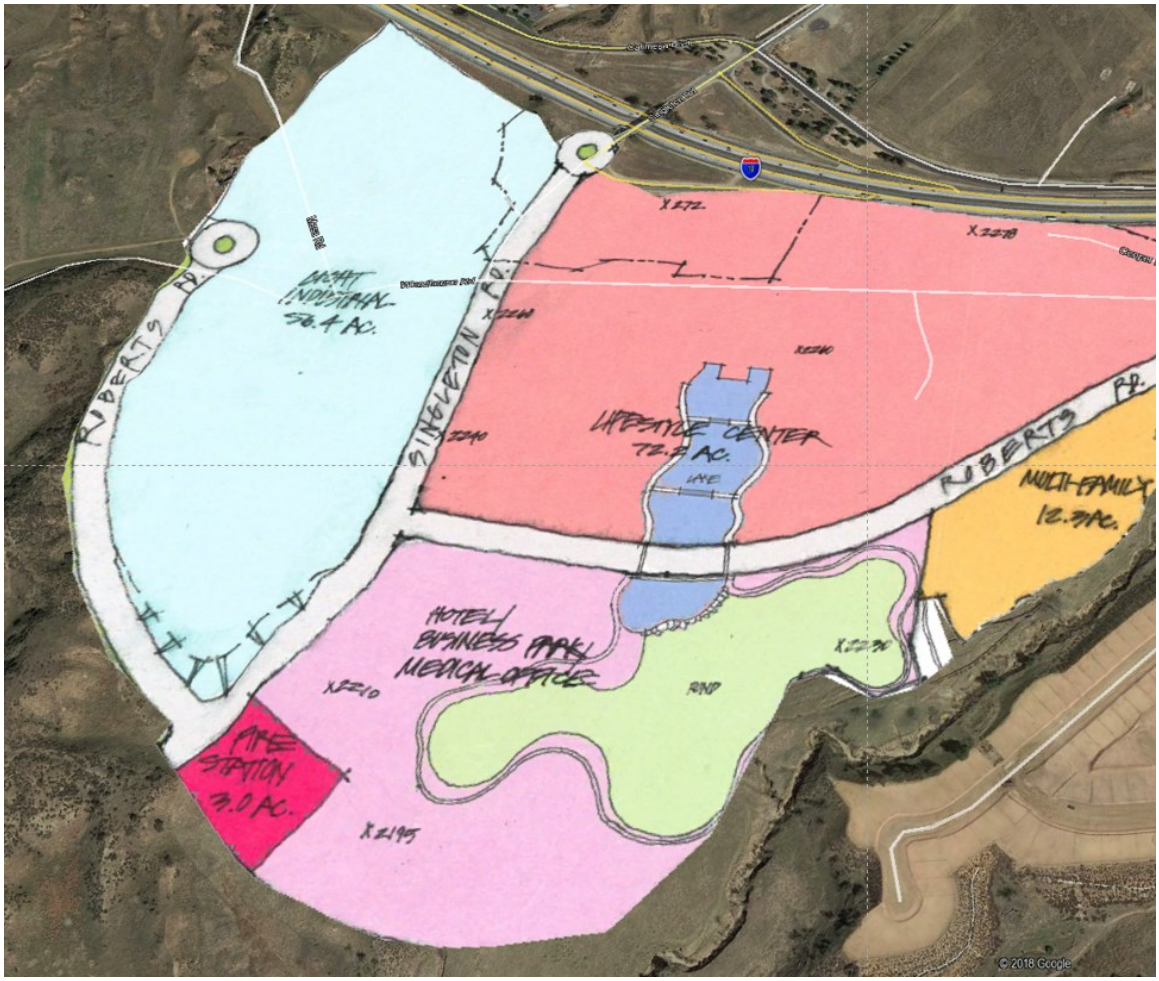
- Equips the Wochholz Regional Water Recycling Facility with advanced treatment including reverse osmosis to achieve an advanced, pure, and renewable water resource.
- Protects water quality in the lower Santa Ana Watershed by maintaining high quality water in the upper watershed as the water of the upper basins eventually flows to the downstream basins.
- Relies upon the Inland Empire Brineline, originally constructed by the Santa Ana Watershed Authority, and a 15-mile extension constructed by the Yucaipa Valley Water District.
- The Yucaipa Valley Water District is capable of achieving a zero-discharge providing the ultimate protection of downstream water resources consistent with the goals of the Clean Water Act.

STATE OF CALIFORNIA BENEFITS:

- Reduces the need for water to be imported from northern California that would normally be required to meet future water demands.
- Conservation, including efficiency water use and reclamation, is consistent in protecting the best interest of the State of California.

The Yucaipa Valley Regional Water Supply Renewal Project

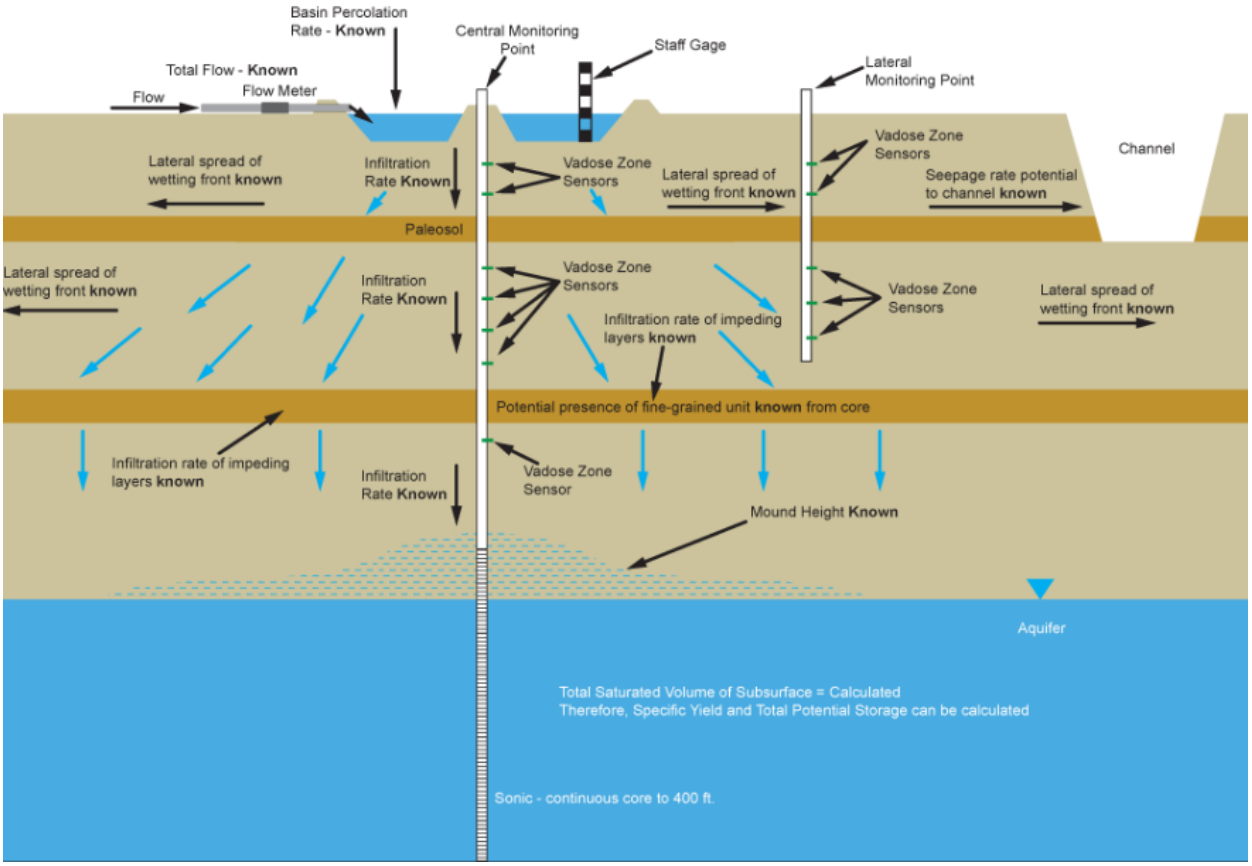
The Yucaipa Valley Regional Water Supply Renewal Project is an innovative salinity control project that will effectively eliminate the buildup of minerals in the Yucaipa Valley that degrade drinking water supplies. The overall project involves expanded reverse osmosis infrastructure at the Yucaipa Valley Regional Water Filtration Facility (Salinity Concentrate Reduction and Minimization "SCRAM" System); an expanded reverse osmosis and treatment infrastructure at the Wochholz Regional Water Recycling Facility (Salinity and Groundwater Enhancement "SAGE" Project); and a recharge facility at the Calimesa Lake and Spreading Basins. Coupled with the District's aggressive recycled water program, these projects will minimize the amount of water imported from the fragile ecosystem in northern California and allow for the maximum use of high-purity recycled water.



Long-Term Infiltration Study for the proposed Calimesa Lake and Spreading Basins

The District staff has been working with Geoscience for the development and operating plan for the proposed Calimesa Lake and Spreading Basins. Based on a thorough evaluation and study of the groundwater basin, the District will be able to effectively operate and manage the westerly portion of the Beaumont Basin consistent with the adjudication overseen by the Beaumont Basin Watermaster (http://www.beaumontbasinwatermaster.org/)

The attached scope of services will utilize the installation of monitoring wells to determine the water mounding effect and lateral movement of subsurface water when the spreading basins are constructed.



This information is necessary to be able to properly size and operate the proposed spreading basins.

GEOSCIENCE

September 26, 2018

Mr. Joe Zoba
General Manager
Yucaipa Valley Water District
Post Office Box 730
Yucaipa, California 92399-0730

Subject: Proposal to Conduct Pilot Recharge Test to Evaluate Long-Term Infiltration Rates At Proposed Oak Valley Town Center, Calimesa, California - DRAFT

Dear Joe:

Per your previous authorizations we have completed two phases of initial work to assess the feasibility of a recharge project at the proposed Oak Valley Center in Calimesa, California. The first phase of work (Task1) consisted of review of both published and unpublished geologic information and construction a lithologic model using approximately 40 driller's logs in the site vicinity. The purpose of Task 1 was to assess whether there were in any continuous fine-grained lithologic units in the subsurface that could impede the downward movement of surface recharge. The lithologic model suggested that there were fine-grained lithologic units in the subsurface, but the distribution might be related to a USGS mapped fault which is shown to traverse the site. The most recent phase of work (Task 2) was site geologic mapping and completion of a seismic reflection survey across the site in the vicinity of the proposed area of a recharge basin. The purpose of Task 2 was to evaluate the distribution and configuration of subsurface lithologic units and to evaluate the configuration of faulting in the subsurface. The seismic reflection data collected showed that the site is underlain by permeable alluvial material to a depth of at least one hundred feet (Qya_5) below ground surface which in turn is underlain by the permeable Pleistocene aged Live Oak sedimentary units (Qlo) to a depth of approximately 300 feet. The Live Oak unconformably overlies the San Timoteo formation (Tstm). Although, the San Timoteo fault is shown to cross the site, the seismic reflection data indicates that the fault does not offset material within the upper 300 feet below ground surface. The inset below shows the seismic reflection profile and geologic interpretation.

GEOSCIENCE SUPPORT SERVICES INCORPORATED
Ground Water Resources Development
P.O. Box 220, Claremont, CA 91711
T: 909-451-6650
F: 909-451-6638

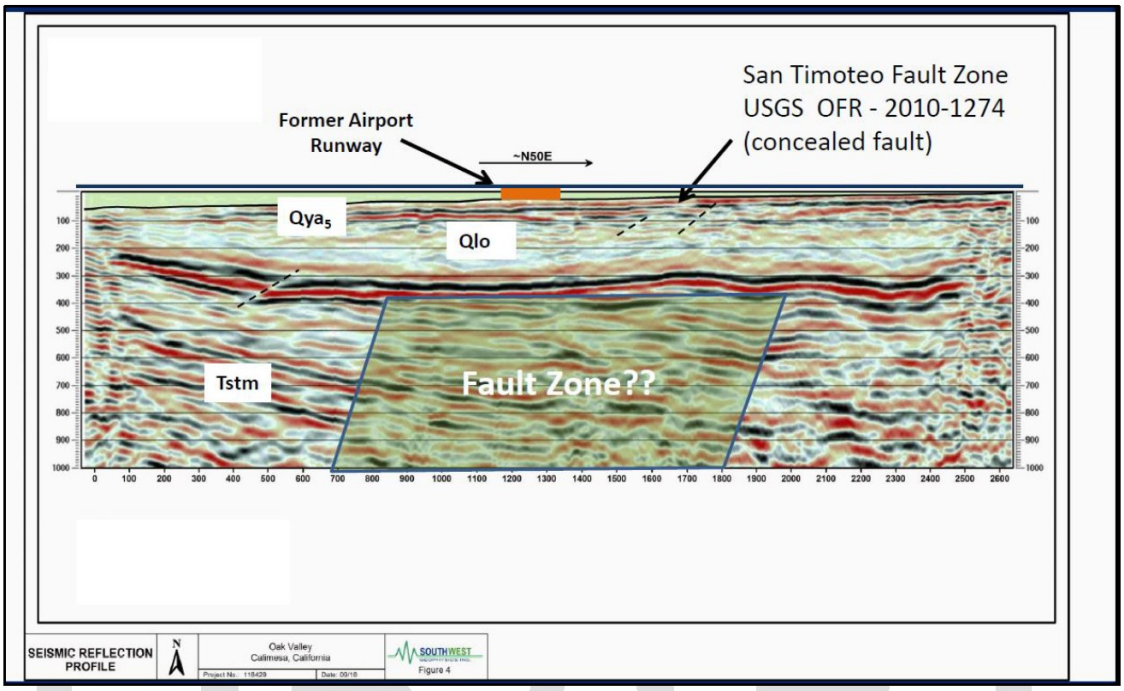


Figure 1 - Seismic Reflection Profile

Surface geologic mapping of exposures in channels that are present on both the eastern and western edges of the site, show buried older soils (paleosols) that likely extend across the site a depths below approximately 25 feet below ground surface. The inset below shows two soil horizons that are present in the subsurface at the site.

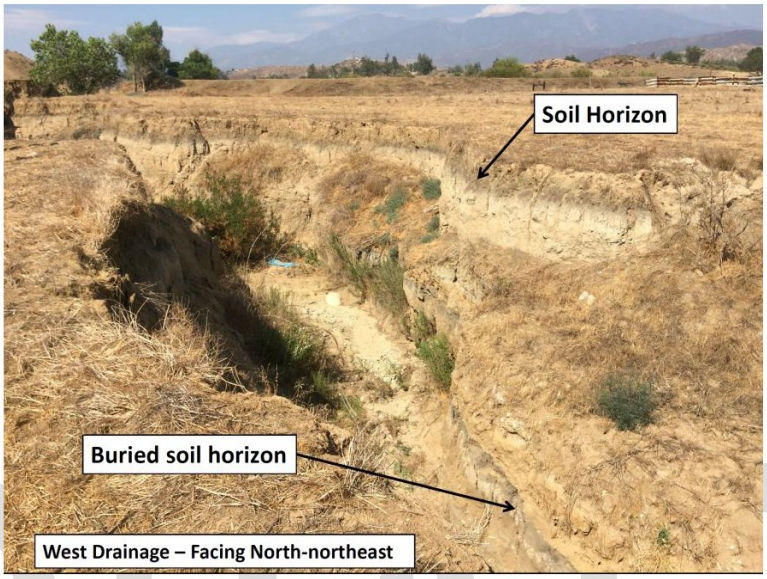


Figure 2 – Westerly Channel Exposure Showing an Upper and Lower Soil Horizon

Therefore, the purpose of this phase of the feasibility study is to 1) determine the lithologic materials in the vadose zone beneath the proposed recharge site area, 2) Measure the vertical rate of infiltrating water through the subsurface lithologic material, and 3) evaluate the extent of the horizontal movement of infiltrating water to ensure that percolating water will migrate vertically to the groundwater table. To do this a one-half acre pilot recharge basin will be constructed. Two monitoring points will be constructed, one in the center of the pilot recharge basin and another between the pilot recharge basin and the easterly channel. Water will be infiltrated in the pilot recharge basin until migrating wetting front reaches the groundwater table beneath the site. The vertical rate of infiltration through the vadose zone will be determined using vadose zone instrumentation coupled with a piezometer to be constructed in the center of the pilot recharge basin. The horizontal rate of movement of the wetting front will be determined through use of a second vadose zone instrumentation site to be located approximately 250 feet from the pilot recharge basin, a location midway from the pilot recharge basin and the easterly channel. The inset below shows the approximate location of the pilot recharge basin and monitoring points.

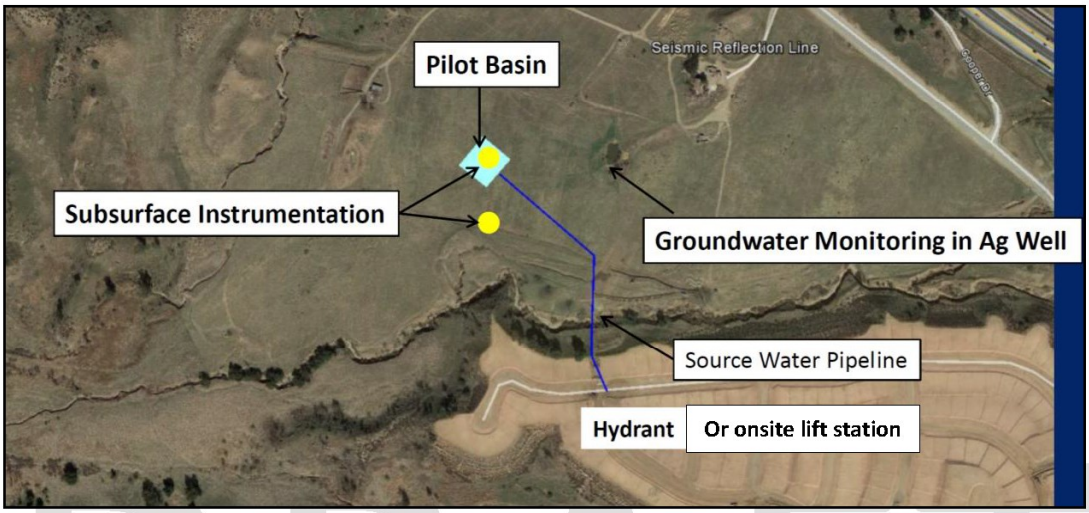


Figure 3 – Pilot Recharge Test Basin Location and Monitoring Points

The descriptions below provide an overview of the major portions of the pilot recharge investigation. Table 1 attached provides details of each component of the proposed work.

Task 3 - Installation of Vadose Zone and Groundwater Monitoring Points

Prior to construction of the pilot test basin, the site specific stratigraphy will be investigated using a sonic drilling rig and collection of continuous core to a depth of approximately 400 feet. The purpose of drilling to 400 feet is to collect lithologic samples for future extraction well design. The borehole will be drilled in the center of the selected area of the pilot basin. After completion of the borehole, a geophysical survey will be conducted to aid interpretation of the depths of lithologic contacts. After completion of the geophysical survey, the lower approximately 200 feet will be backfilled with bentonite. A 2-inch monitoring well will be constructed in the boring, with approximately 60 feet of screen starting from approximately 20-feet above the water table as encountered in the boring. The monitoring well will be equipped with a pressure transducer which will be used to indicate the time at which the wetting front reaches the groundwater table and the height of the groundwater mound as infiltration testing continues. The monitoring well will be developed using a pump. At the end of the development period a ground water sample will be collected and analyzed for general mineral, general physical, selected pesticides, and oil and grease.

The vadose zone with be equipped with moisture and temperature sensors. The sensors will be attached to the blank well casing between at 15-ft intervals between 10-ft and 100 ft below ground surface. The sensors will be activated as the wetting front from the surface recharge moves downward. The rate of infiltration will be calculated between sensors and compared to the lithologic log. The

specific yield of the sediments will be calculated using the extent of wetting front migration along with the volume of recharge water placed into the basins.

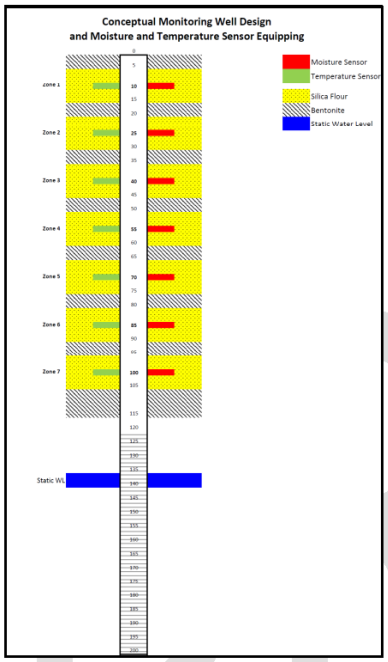


Figure 4A - Schematic Center Basin Monitoring Installation

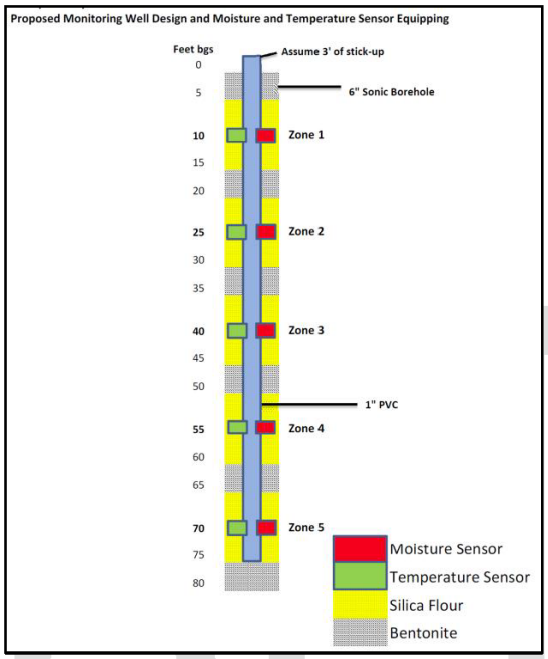


Figure 4B - Schematic of Second Monitoring Installation

A second vadose zone monitoring point will be constructed in like fashion to a depth of 80 feet. The location of the second vadose zone monitoring point will be approximately 250 feet south of the pilot recharge basin, a a location approximately half way between the pilot recharge basin and the easterly channel. Sensors will be placed in 15-ft intervals from 10 feet to 70 ft below ground surface. The purpose of the second vadose monitoring point is to assess the lateral rate of movement of the wetting front and to ensure that infiltrating water does not reach the easterly channel above the invert elevation of the channel. The specific subtasks associated with Task 3 are shown on Table 1

Task 4 - Pilot Testing - Artificial Recharge Basin Construction and Monitoring.

A one-half acre basin will be constructed for the pilot recharge test. The depth of the basin will be such that the footprint of the basin is below the shallow clayed soil horizon shown on the photograph in Figure 2 above. The depth of the shallow soil profile will be verified with the boring. Water will be

provided to the test basin site by YVWD. The basin will constructed with 3:1 inner slopes. The material excavated from the basin will be stockpiled a minimum of five feet from the edge of the basin. A temporary security fence will be installed around the perimeter of the basin and around the second monitoring installation. At the basin site Geoscience will install a totalizing flow meter and control valve to allow maintaining a constant head in the basin and record the total flows in the basin with time. The pilot recharge basin will be equipped with a staff gage and stilling well in which a pressure transducer will be placed to provide a continuous recording of water levels during the test. The information from the monitoring installation (vadose and groundwater) and the water levels and flow into the basin will be collected continuously and remotely. In addition, the on-site inactive agricultural water well will be equipped with a transducer to measure groundwater levels during the test period. The instrumentation will be field checked three times during the first week and weekly thereafter until the end of the test. However, if remote data indicates a problem with water levels or flow rates, Geoscience personnel will go immediately to the site to resolve any issues that might arise. We will continue to test the infiltration rates and volumes for a period of two weeks after the surface wetting front reaches the groundwater surface. We anticipate that the total test period will be from four to six weeks.

The recharge rate will be calculated weekly and provided to the District as a part of a weekly e-mail progress report. After the test period, fencing and will be removed and the soil excavated from the basin will be replaced in the excavation and wheel rolled. We assume that the monitoring well will remain onsite for monitoring of future recharge operations. The second monitoring point will be excavated down to a depth of 20-ft and backfilled with site soils.

Task 5 - Summary Report (Tasks 1 through 4)

Geoscience will prepare report presenting all of the data collected and analysis completed as a part of recharge feasibility study for the Oak Valley Center. The report will provide assessment of the long-term infiltration rates and the anticipated available groundwater storage at the site under current groundwater conditions. To evaluate long-term operational strategies including conditioning the groundwater basin, evaluation of put and take scenarios, and determination of travel time and recycled water percentage in the groundwater aquifer with time, we recommend that an appropriate groundwater model be constructed for the project area. A draft report will be submitted to the District for review and comment. Geoscience will incorporate District comments and prepare and submit the final feasibility report.

Task 6 – Meetings and Presentations

Geoscience will prepare weekly e-mail progress reports to the District. We plan to have an onsite kick-off meeting with District to go over the pilot test recharge program and all activities associated with the program. After three weeks of testing, Geoscience will provide host a progress meeting at the site to go over the results of the testing. Geoscience will provide a summary of the test results immediately after

the end of the test and completion of data analysis but prior to submission of the draft report. Geoscience will meet with the District to go over the feasibility study and pilot test results after submission of the draft. Therefore we assume three face-to face meetings with the District for the project.

Our estimate of costs to complete the work will be based on time and materials as estimated on the attached table. If you have any questions regarding the proposed work or costs, please call me at (909) 451-6650. Thank you for the opportunity to continue to assist the District in this important project.

Sincerely,

Brian Villalobos, CEG, CHg.
Principal
Encl.

Yucaipa Valley Water District

Table 1
DRAFT

Planning Level Cost Proposal for Professional Hydrogeological Services Related to

Pilot Recharge Test to Evaluate Long-Term Infiltration Rates At Proposed Oak Valley Town Center, Calimesa, California

Task Description			GEOSCIENCE SUPPORT SERVICES, INC.								
			Principal Geohydrologist	Project Geohydrologist	Staff II Geohydrologist	CAD/GIS Operator	Clerical	GEOSCIENCE Labor	Subcontractor Labor	Reimbursable Expenses[1]	Temporary Equipment	Total Cost
		Hourly Rate:	$240	$195	$150	$119	$100					
3.0	Installation of Vadose Zone and Groundwater Monitoring Points											
	3.1	Program Development and Preparation	4	25	36			*$ 11,235*	$ -	$ -	$ -	$ 11,235
	3.2	Site Visit with Client and Contractors	5	5				*$ 2,175*	$ -	$ 500	$ -	$ 2,675
	3.3	On-Site During Drilling of One 6" Dia. Sonic Pilot Borehole to Approximately 400 feet bgs	5	18	80			*$ 16,710*	$ 84,258	$ 3,000	$ -	$ 103,968
	3.4	Collection & Logging of Formation Cores Using the Unified Classification System (USCS) During Pilot Borehole Drilling	2		16			*$ 2,880*	$ -	$ -	$ -	$ 2,880
	3.5	On-Site During Geophysical Survey of Pilot Borehole to 400 ft bgs (includes installation of a temporary 4" Dia. Sch. 80 PVC screen to bottom of the borehole)	1	2	8			*$ 1,830*	$ 2,228	$ 250	$ -	$ 4,308
	3.6	Mechanical Grading Sieve Analysis (assume four [4] formation samples)		1	6			*$ 1,095*	$ -	$ -	$ -	$ 1,095
	3.7	Provide Recommended Final Well Design (including gravel pack gradation, slot size, perforated and blank casing depths and diameters, depth of annular seal, and moisture and temperature sensor installation depths)	2	8	4	2	1	*$ 2,978*	$ -	$ -	$ -	$ 2,978
	3.8	On-Site During Backfilling of Pilot Hole to 205 ft bgs with Bentonite		2	8			*$ 1,590*	$ -	$ 250	$ -	$ 1,840
	3.9	On-Site During Sonic Reaming of Pilot Borehole to 10" Dia. to Approximately 205 feet bgs		2	10			*$ 1,890*	$ -	$ 250	$ -	$ 2,140
	3.10	On-Site During 2" Dia. Sch. 80 PVC 205 ft Monitoring Well Construction; Installation of Filter Pack, Bentonite Seals, and Annular Seal (full-time observation)		2	8			*$ 1,590*	$ -	$ 250	$ -	$ 1,840
	3.11	On-Site During Bailing of Sediments From Bottom of Monitoring Well			3			*$ 450*	$ -	$ -	$ -	$ 450
	3.12	On-Site During Pumping Development and Water Quality Sampling of Monitoring Well (including cost for laboratory water quality analyses)		2	8			*$ 1,590*	$ 937	$ 250	$ -	$ 2,777
	3.13	On-Site During installation of 4'x4'x4' Cement Pedestal, Lockable Steel Monument, and One Steel Pole for Mounting Data Logger Boxes and Telemetry.		4	8			*$ 1,980*	$ -	$ 500	$ -	$ 2,480
	3.14	On-Site During Installation of 7 Pairs of Soil Moisture and Temperature Monitoring Sensors (attached to outside of monitoring well)	2	4	5			*$ 2,010*	$ -	$ 4,487	$ -	$ 6,497
	3.15	On-Site During Drilling of One 6" Dia. Sonic Borehole to Approximately 80 feet bg	2	4	20			*$ 4,260*	$ -	$ 500	$ -	$ 4,760
	3.16	Collection & Logging of Formation Cores Using the Unified Classification System (USCS) During Borehole Drilling	1	2	4			*$ 1,230*	$ -	$ -	$ -	$ 1,230
	3.17	Provide Recommended Final Borehole Equipping Design (including moisture and temparature installation depths)	2	8	4	2	1	*$ 2,978*	$ -	$ -	$ -	$ 2,978

Yucaipa Valley Water District

Table 1
DRAFT

Planning Level Cost Proposal for Professional Hydrogeological Services Related to

Pilot Recharge Test to Evaluate Long-Term Infiltration Rates At Proposed Oak Valley Town Center, Calimesa, California

Task Description			GEOSCIENCE SUPPORT SERVICES, INC.								
			Principal Geohydrologist	Project Geohydrologist	Staff II Geohydrologist	CAD/GIS Operator	Clerical	GEOSCIENCE Labor	Subcontractor Labor	Reimbursable Expenses[1]	Temporary Equipment	Total Cost
		Hourly Rate:	$240	$195	$150	$119	$100					
	3.18	On-Site During 1" Dia. Sch. 80 PVC 75 ft Observation Borehole Monitoring Apparatus Construction; Installation of Silca Flour, Bentonite Seals, and Annular Seal (full-time observation)	1	2	8			$ 1,830	$ -	$ 250	$ -	$ 2,080
	3.19	On-Site During Installation of 5 Pairs of Soil Moisture and Temperature Monitoring Sensors (attached to outside of PVC)	1	4	5			$ 1,770	$ -	$ 3,958	$ -	$ 5,728
	3.20	On-Site During installation of Conduit and One Steel Pole for Mounting Data Logger Boxes and Telemetry.		1	6			$ 1,095	$ -	$ 250	$ -	$ 1,345
	3.21	On-Site During Wiring of Monitoring Equipment, Telemetry System, and Setup of Data Loggers at Monitoring Well and Observation Boring Sites	1	2	8			$ 1,830	$ 3,520	$ 250	$ -	$ 5,600
	3.22	As Needed Project Management Support	5	10				$ 3,150	$ -	$ -	$ -	$ 3,150
		Subtotal	*34*	*108*	*255*	*4*	*2*	$ 68,146	$ 90,943	$ 14,945	$ -	$ 174,034
4.0	**Pilot Testing - Artificial Recharge Basin Construction and Monitoring**											
	4.1	One Site Visit During Construction of Recharge Basin and One During Basin Backfilling/Restoration of Site	6	12				$ 3,780	$ 21,970	$ 500	$ -	$ 26,250
	4.2	On-Site For Installation of Flowmeter, Flow Control Valves, Staff Gage, Two Stilling Wells, Sonic Sounder (pond level), and Telemetry	10		10			$ 3,900	$ 1,500	$ 1,420	$ 5,508	$ 12,328
	4.3	On-Site for Installation of Temporary Security Fencing around Recharge Basin and Observation Boring			4			$ 600	$ 3,300	$ 250	$ -	$ 4,150
	4.4	On-Site to Install Pressure Transducers in One New Monitoring Well and One Existing Agriculture Well/Observation Well (2 Transducers Total)		1	4			$ 795	$ -	$ 2,263	$ 162	$ 3,220
	4.5	On-Site for Start of Infiltration Test and Equipment Check	4	6				$ 2,130	$ -	$ 500	$ -	$ 2,630
	4.6	On-Site For Hand Water Level and Downloading Monitoring Well and Observation Well Transducers, and ALL Moisture and Temperature Sensor Data (assume 9 visits for 6-weeks)	8	16	42			$ 11,340	$ -	$ -	$ -	$ 11,340
	4.7	As Needed Project Management Support	4	8				$ 2,520	$ -	$ -	$ -	$ 2,520
		Subtotal	*32*	*43*	*60*	*0*	*0*	$ 25,065	$ 26,770	$ 4,933	$ 5,670	$ 62,438
5.0	**Reporting**											
	5.1	Prepare Weekly Plots of Data (Water Levels, Moisture and Temperature Sensor Data)	6	12	32			$ 8,580	$ -	$ -	$ -	$ 8,580
	5.2	Prepare DRAFT Infiltration Test Results Report	8	24	32	16		$ 13,304	$ -	$ -	$ -	$ 13,304
	5.3	Prepare FINAL Infiltration Test Results Report	4	8	12	8		$ 5,272	$ -	$ -	$ -	$ 5,272

Yucaipa Valley Water District

Table 1
DRAFT

Planning Level Cost Proposal for Professional Hydrogeological Services Related to

Pilot Recharge Test to Evaluate Long-Term Infiltration Rates At Proposed Oak Valley Town Center, Calimesa, California

Task Description			GEOSCIENCE SUPPORT SERVICES, INC.								
			Principal Geohydrologist	Project Geohydrologist	Staff II Geohydrologist	CAD/GIS Operator	Clerical	GEOSCIENCE Labor	Subcontractor Labor	Reimbursable Expenses[1]	Temporary Equipment	Total Cost
		Hourly Rate:	$240	$195	$150	$119	$100					
		Subtotal	*18*	*44*	*76*	*24*	*0*	*$ 27,156*	*$ -*	*$ -*	*$ -*	*$ 27,156*
6.0	**Meetings, Presentations, and Ongoing Evaluation of Data**											
	6.1	Meetings with Client to Present Initial and Final Results of the Study (3 Total) and Weekly Progress e-mails	24	40	16	4	2	*$ 16,636*	$ -	$ -	$ -	$ 16,636
		Subtotal	*24*	*40*	*16*	*4*	*2*	*$ 16,636*	*$ -*	*$ -*	*$ -*	*$ 16,636*
TOTAL HOURS AND COST (TASKS 3-6):			**108**	**235**	**407**	**32**	**4**	**$ 137,003**	**$ 117,713**	**$ 19,878**	**$ 5,670**	**$ 280,264**
TOTAL COST WITH 20% CONTINGENCY (TASKS 3-6):												**$ 336,316**

Notes:

[1] Reimbursable expenses include mileage, field per diem at $250/day and report mailing and reproduction costs.

Operational Updates

Yucaipa Valley Water District

Yucaipa Valley Water District

Workshop Memorandum 18-242

Date: October 30, 2018

Prepared By: John Wrobel, Public Works Manager

Subject: Overview of the Proposed Roadway Improvements to Mountain View Lane, Yucaipa

The District staff continuously evaluates the condition of the water system infrastructure on a regular basis. Through this evaluation, the District is able to identify water mainlines and other assets that are in need of repair or replacement.

The water mainline on Mountain View Lane was an old 4-inch steel pipe that was subject to numerous leaks. The District staff replaced 1,200 linear feet of water main, replaced twenty-four services, three hydrants, and an air vacuum appurtenance. To complete this project, the District staff recommends repaving this private street.

District staff solicited three bids from local paving contractors with the following results.

Contractor	Amount
JB Paving	$105,250
Roquet Construction	$107,711
PacWest Engineering	$115,640

Based on the results above, the District staff recommends that the Board of Directors award the contract to JB Paving for a sum not to exceed $105,250.

Financial Consideration

Funding for this expense will be from Water Fund, Public Works, R & M Pipelines [GL Account #02-5-03-51020]. This was not included in the 2018-19 budget. A budget adjustment will be presented to the Board for recommended approval at a future meeting.

JB Paving & Engineering, Inc.
32425 Dunlap Blvd. Yucaipa, CA 92399
Office: 909-335-7428 Fax: 909-335-8952
State Contractor's License 998980

Proposal

Date: 10-20-17

Revised bid 10-4-18

To: YVWD
Attn: Jessie
Re: Mt View Lane Yucaipa

Entire road rehab

1) Pulverize all existing asphalt in place, approx. 42,000 SF.
2) We are pulverizing at curb face, not replacing old asphalt berms.
3) This bid includes up to 150 LF. of new header board.
4) Fine grade and compact pulverized material.
5) Haul off minimal spoils as needed.
6) Apply weed kill and install 4-inch new asphalt.

Total $105,250.00

Jim Brothers
909-772-7144

Roquet Construction, Inc.
P.O. Box 2677
Riverside, CA 92516
(951) 233-3894
ROQUETCONSTRUCTION@GMAIL.COM
License # 455828

PROPOSAL/CONTRACT NO. 101118-1

To:
Yucaipa Valley Water District
12770 2nd Street
Yucaipa CA 92399

October 11, 2018

Roquet Construction Inc.
Estimator: Joe Roquet
(951) 453.1228

Phone: (909) 797.5117
Attn: Jesse McCartney Email: jmccartney@yvwd.us

JOB LOCATION: **Douglas (and) Mt. View - Yucaipa**

We hereby submit specifications and estimates for:

Item	*quantity*	*unit price*	*total*

DOUGLAS

- Sawcut, remove and replace water patch crossing on Douglas with 4" asphalt (2 lifts) over native subgrade: Approx. 180 sq. ft.

Mt. View

- Pulverize entire roadway and leave grindings in place (within 12" of AC berm).
- Re-grade subgrade dirt and grindings to new street design to create high crown and better drainage and compact.
- Fine grade same area.
- Apply weed sterilant to all areas getting paved.
- Raise sewer manholes on east west section of roadway only to create better drive elevations: 2/each
- Place 4" asphalt (one-lift) and compact with 10 ton roller: Approx. 42,000 sq. ft.
- Install 125' 2x4 Redwood Header.

LUMP SUM $107,711.00

Notes:
Only items specifically listed above are part of this contract.
Includes one move.
Excludes over-x of subgrade.
RCI not responsible for poor subgrade due to the existing condition of the street.

Page 1 | 3

PACWEST ENGINEERING CO. INC.
LIC#:000833

DATE: 10/9/2018
QUOTE #: 180548
BID EXPIRES: 1/7/2019
ESTIMATOR: EDWARD TORRES

PROPOSAL / CONTRACT

COMPANY: YUCAIPA VALLEY WATER DISTRICT
ADDRESS: 12770 SECOND STREET
YUCAIPA, CA 92399
PROJECT: MOUNTAIN VIEW LANE
CITY: YUCAIPA, CA
PROJECT #:

CONTACT: JAMIE CANSLER
OFFICE #: 909.797.5117
CELL #:
FAX #:
EMAIL: JCANSLER@YVWD.US

ITEM	DESCRIPTION	QTY	U/M	U/P	EXTENSION
1.0	PULVERIZE ALL EXISTING ASPHALT IN PLACE. FINE GRADE AND COMPACT PULVERIZED MATERIAL. HAUL OFF SPOILS AS NEEDED.	41,300.00	SF	$0.70	$ 28,910.00
2.0	REMOVE AND REPLACE UP TO 4" IN DEPTH WITH 1/2" CONVENTIONAL ASPHALT MATERIAL PG64-10 PER CITY OF YUCAIPA STANDARDS, ROLL AND COMPACT. APPLY WEEDKILL.	41,300.00	SF	$2.10	$ 86,730.00

TOTAL: $115,640.00

INCLUSIONS:
Quote Includes Labor, Equipment, Material and Traffic Control for our work (unless noted otherwise); Posting of No Parking Signs; One (1) Mobilization/Shift during regular daytime weekday work hours.

EXCLUSIONS:
Prevailing Wages unless otherwise noted, USA, Potholing, SWPPP, Erosion Control, Road/Steel Plates, Traffic Control Plans, Permits, Temporary Striping/Traffic Markings, Permanent Striping, Road Markings (Stencils), Raised Pavement Markers (RPM's), Marking and/or Layout, Engineering, Survey, Material Testing, Major Traffic Control (Ramp/Freeway Lane Closures), Construction Water (Water to be supplied by Prime Contractor and accessible to our equipment), Profile Milling, Profilograph, Seeporting, Special Material Blends (Asphalt Material with Rubber, Latex and/or other special asphalt mix designs), Slurry Seal, Subgrade Preparation/Compaction, Adjustment of Utilities (Including but not limited to Sewer/Storm Drain Manholes, Cleanouts, Water Valves, Precast Enclosures, Vaults), Removal of Hazardous Waste, Dirt, Aggregate Base, Fabric, PCC (Concrete), Clay, Construction Debris, Job Site Maintenance. Upon completion of our work PacWest Engineering is relieved of all liability for work completed; protection/maintenance shall become the responsibility of others.

GENERAL:
This Quotation shall become part of any future contract/purchase order unless otherwise agreed.
PacWest Engineering excludes notification to any underground alert service, marking and/or location of any underground utilities. Upon execution/acceptance of this quote the customer accepts sole responsibility for any/all subsequent liabilities coincident with the following requirements of the California regional notification center law pursuant to Article 2 (commencing with Section 4216) of Chapter 3.1 of Division 5 of Title 1 of the government code.

Accepted By: _____ Print Name: _____

Date: _____ PO #: _____

PacWest Engineering Co, Inc. | 684 E. Orange Show Rd, San Bernardino, CA 92408 | Ph: 951.333.5802

Yucaipa Valley Water District

Workshop Memorandum 18-243

Date: October 30, 2018

Prepared By: John Wrobel, Public Works Manager

Subject: Overview of Proposed Sewer Mainline Repairs in Wildwood Creek, Yucaipa

The District staff performs routine inspections, maintenance, and repairs of the sewer collection system within Yucaipa and Calimesa. One commonly used inspection procedure is to video the interior of the sewer mains to ensure the mainline integrity and to identify any root intrusions.

During one of the recent video inspections, District staff found a section of 10-inch HDPE sewer mainline that had been compromised. This section of pipe is located just south of Wildwood Canyon Road, on the north side of Yucaipa Creek, in the channel. This section of pipe was last repaired in early 2011. During the 2010 winter storms, approximately 560 feet of this sewer main collapsed and an emergency repair was made using HDPE pipe. After the repairs were made in 2011, this section of pipe was video inspected, and no defects were found.

District staff solicited 3 proposals from local contractors capable of making proper repairs to HDPE pipe.

Contractor	Amount
Weka, Inc.	$32,684
ProCraft Construction	$64,000
Merlin Johnson Construction	$73,350

District staff recommends that this job be awarded to Weka, Inc.

Financial Consideration

Funding for this expense will be from Sewer Fund, Treatment, R & M Structures [GL Account #03-5-02-51003]. This was not included in the 2018-19 budget. A budget adjustment will be presented to the Board for recommended approval at a future meeting.


N20-1 TO N19-26
EASEMENT D/S
EST:248'
PAGE N20PAGE N19
8ins VCP
0447.8' 03/03/17 11:16


N20-1 TO N19-26
EASEMENT D/S
EST:248'
PAGE N20PAGE N19
8ins VCP
0447.9' 03/03/17 11:16

Yucaipa HDPE line repair final 8/7/2018 11:48 AM

WEKA INC. QUANTITY		UNIT	Yucaipa HDPEsewer line repair DESCRIPTION	UNIT PRICE	TOTAL BID AMOUNT
1	1	LS	Mob/demob	3,600.00	3,600.00
2	1	LS	repair sewer main	17,184.00	17,184.00
3	1	LS	remove and replace rock	3,900.00	3,900.00
4	1			0.00	0.00
5	1			0.00	0.00
6	1			0.00	0.00
7	1			0.00	0.00
8	1			0.00	0.00
9	1			0.00	0.00
10	1			0.00	0.00
11	1			0.00	0.00
12	1		Alt grout rock	0.00	0.00
13	25	CY	grout rock as necessary to protect pipe	320.00	8,000.00
14	1			0.00	0.00
15	1			0.00	0.00
			GRAND TOTALS		32,684.00

Pro-Craft Construction, Inc.
31597 Outer Hwy. 10 South
Suite B, Redlands, CA 92373
909-790-5222 * Fax 909-797-2812
License # 467234 A, B ,C-2, C-34,C-36, C-42,
DIR REGISTRATION #1000001106

Proposal R1

To:	YVWD	**Attn:**	Dustin Hochreiter
Email:	dhochreiter@yvwd.us	**Date:**	7/6/2018
Phone:	909-797-5118	**Pages:**	1
Re:	Wildwood Creek Repair	**From:**	Travis Burton

Plumbing • Piping • Engineering

Scope: Repair 10" HDPE Sewer Main

1. Mobilization
   a. Equipment Delivery
2. Demo
   a. Rock removal and storage on-site
3. Excavation & Repair
   a. Excavate at point of damage
   b. Remove damaged 10" and replace with kind material
   c. YVWD to perform visual inspection of repair
   d. Sand bedding & cover for protection
4. By-Pass removal
   a. Cleaning of piping
5. Rock Placement
   a. Install rock around 10" for added protection
6. De-Mobilization
   a. Final Clean of all areas
   b. Haul off all equipment

Sewer Repair Total----------$64,000.00

If this transmission is incomplete, please call 909.790.5222

Merlin Johnson
PIPELINE CONTRACTORS
Construction, Inc.
License # 467306
P.O. Box 777 • Mentone, CA 92359
(909) 794-7702 • Fax (909) 794-3653

June 27, 2018

Ryan Janisch
Yucaipa Valley Water District
12770 Second St.
Yucaipa, CA 92399

Re: 10" HDPE sewer line repair on Wildwood Canyon

Ryan

Per our meeting @ the settling ponds on Wildwood Canyon Rd and Holmes St. I have worked up a cost to repair a section of existing 10" HDPE sewer pipe that was damaged by the County. Our proposal includes and excludes the following:

Included:

1. Remove all existing rock in drain basin around the 10" HDPE sewer line.
2. Remove portion of the existing 10" HDPE where pipe is damaged.
3. Furnish and install new 10" HDPE @ damaged area. (Approx. 20' of HDPE)
4. Re-install all rock in drain basin
5. Furnish and install sewer By-pass while work is being done. (Approx. 650' of bypass)
6. Clean up work area

Exclude

1. Any and all permits that may be needed to complete the project.
2. Any concrete or shotcrete in drain basin area.

Lump Sum = $73,350.00

All work is to be done per YVWD standards

Administrative Items

Yucaipa Valley Water District

Yucaipa Valley Water District

Workshop Memorandum 18-244

Date: October 30, 2018

From: Joseph Zoba, General Manager

Subject: Consideration of Approving Anticipated Reimbursable Expenses for Board Member Participation at the Association of California Water Agencies Conference

On August 3, 2016, the Board of Directors approved Resolution No. 2016-21 which updated the policy for reimbursement of actual and necessary expenses for the Board of Directors. Section 2 and Section 3 of Resolution No. 2016-21 are pertinent to receive reimbursement for expenses incurred by board members.

2. Reimbursable Expenses of Board Members. As authorized by Government Code, Section 53232.2 the following actual and necessary expenses incurred by Board members in the performance of their official duties shall be reimbursed by the District:
   (a) Mileage at the rate established by the Internal Revenue Service to and from all Meetings as defined by the District's Ordinance No. 53-2007 and this Resolution;
   (b) Travel and lodging expenses that have been approved by the Board of Directors prior to the date the meeting, seminar, or event.
   (c) Meal expenses incurred by a board member in attending such meetings with detailed receipts;
   (d) Lodging costs, in connection with a conference or organized educational activity conducted in compliance with the Brown Act, including but not limited to the ethics training in Section 4 below, shall not exceed the maximum group rate published by the conference or activity sponsor or if no group rate is provided then the lodging cost shall not exceed the government and group rates offered by a provider of transportation or lodging services for travel and lodging when available.

3. Expense Report Requirements. The District shall provide written expense report forms to be filed by the District's Board members for reimbursement of actual and necessary expenses incurred on behalf of the District in performance of official duties. Such filings shall include all receipts for such expenses. Reimbursable expenses to be reported shall include, but not be limited to, mileage, meals, lodging, and other travel-related expenses. All such expense reports shall constitute public records under the California Public Records Act. The District Board member shall provide brief oral reports on meetings attended at the expense of the District at the next regular meeting of the District's Board of Directors.

The Association of California Water Agencies 2018 Fall Conference will be in San Diego from November 27 to November 30.

The purpose of this agenda item is to receive authorization for reimbursement and to determine the board members interested in attending this event.

I encourage you to attend ACWA's 2018 Fall Conference & Exhibition, *"Investing Today for Water Tomorrow"* November 27-30, at the Manchester Grand Hyatt San Diego. It's been an extraordinary year for California's water industry and ACWA conferences present an ideal opportunity to access the best, latest and most valuable information.

California continues to rise to our water management challenges, with this year being one of significant successes. California voters in June approved Proposition 68, with $1.6 billion for water-related projects. In November, voters will have the opportunity to augment that investment by approving Proposition 3, an $8.8 billion water bond. The California Water Commission approved $2.7 billion in funding for storage projects across the state that will help boost storage capacity and reliability. In Sacramento, ACWA and local water agencies successfully advocated against a statewide tax on water bills. The debate continues over the State Water Board's Bay-Delta Plan update by those concerned about flow requirements and future water deliveries. Working together, we have proven that we can tackle the challenges and improve our successes for the betterment of future generations.

ACWA's Fall Conference & Exhibition welcomes diverse perspectives - agricultural and urban, large and small agencies - to attend more than 80 meeting and program sessions to help you stay informed and updated on a variety of local, statewide, and federal water issues, important and critical information that you and your organizations need to know. Networking opportunities will allow you to connect with the California water community, learn best practices, and exchange ideas. The conference also offers continuing education credits related to legal, energy, financial, and drinking water topics for professionals seeking contact hours.

And as always, the ACWA Exhibit Hall will be filled with nearly 100 vendors showcasing products and services that may offer you just the right solutions for your water agency's needs.

Please join us in San Diego as we continue to invest for the future!

Best regards,

Brent Hastey
ACWA President

2 | ACWA 2018 Fall Conference & Exhibition

CONFERENCE HIGHLIGHTS

WEDNESDAY OPENING BREAKFAST

Wednesday, Nov. 28 | 8:00 AM – 9:45 AM

DWR Director Karla Nemeth to Speak at the Opening Breakfast

Karla Nemeth was appointed Director of the California Department of Water Resources by Governor Edmund G. Brown Jr. on January 10, 2018. She oversees DWR operations, including maintaining the California State Water Project, managing floodwaters, monitoring dam safety, conducting habitat restoration, and providing technical assistance and funding for projects for local water needs. Director Nemeth will provide an in-depth look at what's in store for DWR in 2019.

WEDNESDAY LUNCHEON

Wednesday, Nov. 28 | 11:45 AM – 1:45 PM

Water Foundation CEO Wade Crowfoot to Keynote Wednesday Luncheon

California is experiencing yet another change in state leadership at a critical time for water policy. What should the next administration do – and not do – to take advantage of recent successes and avoid the pitfalls of past administrations? Wade Crowfoot, Chief Executive Officer of the Water Foundation and a past senior official in the Brown administration, will share his perspective.

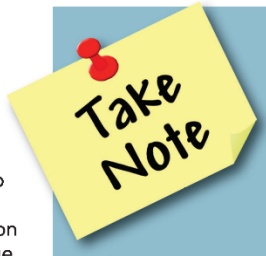
Check the ACWA website for updated conference information.
WWW.ACWA.COM

FRIDAY BREAKFAST

Friday, Nov. 30 | 8:30 AM – 10:00 AM

And You Thought 2016 Was Contentious

The 2016 election brought about significant change to our federal government and the 2018 mid-term results are certain to do so as well. What's next? During this Conference's Hans Doe Breakfast, attendees will hear from DC Insiders and learn about who is in, who is out and how to navigate the new lineups.



Regions 1-5 Membership Meetings MOVED to AM!

Membership Meetings for Regions 1, 2, 3, 4 and 5 are meeting this conference on Thursday, Nov. 29 at 7:45 - 9:15 AM. Be sure to check the conference program for the location.

Wednesday Prize Drawing Fiesta Reception in the Exhibit Hall (5-6 PM)

BACK BY POPULAR DEMAND - Enjoy a fiesta themed reception, mingle with your peers and exhibitors and win great prizes!

All raffle prizes will be drawn on Wednesday night (excluding the Grand Prize) and you must be present to win.

THE SOCIAL SET-UP

Thursday, Nov. 29 • 8:00 - 9:15 a.m.

@The ACWA Lounge in The Exhibit Hall

On the fence about catching the SOCIAL MEDIA wave or maybe just testing the water?

Experienced social media specialists will be available to help you launch new accounts and provide tips for establishing your social media presence.

#ACWAConf

CONFERENCE PROGRAMS

Programs are subject to change without notice.

ATTORNEYS PROGRAMS

These programs have been approved by the State Bar of California for attorneys to receive general MCLE credits.

Wednesday, Nov. 28 | 10:00 – 11:30 AM

What do the New Water Conservation and Efficiency Requirements Mean for your Agency?

Our changing climate requires Californians to move beyond temporary emergency drought measures and adopt permanent changes to use water more wisely and prepare for more frequent and persistent periods of limited water supply. Conservation and efficiency also reduce the energy needed to pump, transport, treat and deliver water. This panel will outline the new water conservation and efficiency requirements established by the Legislature in 2018. The panel will also provide an overview of the implementation process and deadlines for urban and agricultural water suppliers and what they mean for your water agency.

Thursday, Nov. 29 | 9:30 – 11:00 AM

SB 998 (Dodd) Water Service Shut-Offs – What Now?

Despite a statewide opposition coalition lobbying effort which in turn generated many individual water agencies to weigh in, Governor Brown ended up signing SB 998 into law. SB 998 will have significant impacts on water purveyors in California. This panel will discuss the legislative path that brought us SB 998, as well as the legal, practical, and logistical implications and the interplay with Propositions 218 and 26 in the new law.

Thursday, Nov. 29 | 2:00 – 3:15 PM

Masterpiece Cakeshop v. Colorado Civil Rights Commission: A Recipe for Fair Hearings

This high-profile 2018 U.S. Supreme Court decision has important implications for public agencies, which must often act in a quasi-judicial capacity. In the case, the Court ruled that the Colorado Civil Rights Commission violated a business owner's free exercise of religion because the Commission expressed flagrant hostility against the owner during a public hearing.

This panel discussion will provide an overview of the case and its implications for water agencies in their role as hearing bodies. It will include a discussion of best practices to assure stakeholders of fair hearing panels and processes and to isolate public agencies from exposure that can arise from individual bias attributable to the agencies themselves.

COMMUNICATIONS COMMITTEE PROGRAM

Wednesday, Nov. 28 | 2:00 – 3:15 PM

Infernos and Information: Communication Lessons Learned During and After a Fire

Representatives from two water agencies that experienced devastating fires in 2017 will share their experiences communicating vital water quality and related information to the public. From challenges of navigating approval for boil water notices to contacting customers who no longer have a home address, these panelists will recount lessons learned related to transparency, media relations and rumor control.

ENERGY COMMITTEE PROGRAMS

These programs may count toward the Certified Energy Manager (CEM) continuing education credit.

Wednesday, Nov. 28 | 10:00 – 11:30 AM

Life After SB 100: The State's Zero Carbon Goal and Opportunities for the Water Sector

The power sector has been going through a significant transformation to achieve the State's existing climate change targets. This year, Governor Brown signed SB 100 directing the State to plan for 100% of electricity in California to come from zero carbon resources and renewable energy by December 31, 2045. This program will explore how water agencies can win in the SB 100 framework and the changing power markets.

Wednesday, Nov. 28 | 2:00 – 3:15 PM

Decarbonizing the Economy and Making Money

Many businesses in California are comprehensively integrating water savings and distributed energy resources into their operations to improve their bottom lines. These companies are setting aggressive climate change targets, hiring experts in water and energy, engaging in the power market, and achieving operational efficiencies. This program will explore the lessons from those at the forefront of sustainability that water agencies can learn from.

CONFERENCE PROGRAMS

State Water Resources Control Board Drinking Water Contact Hours may be available for qualifying programs.

FINANCE PROGRAMS

CPAs may receive continuing education credit by attending these programs.

Wednesday, Nov. 28 | 10:00 – 11:30 AM

The Good, the Bad, and the Ugly: Tax Cuts and Jobs Act (TCJA) and New GASB Pronouncement Impacts to Muni Financing

New GASB pronouncements may make funding rebate and other conservation programs possible through tax exempt debt. New tax cuts and changes have a profound impact on municipal obligations. Find out what impacts are good, bad, and ugly (we mean uncertain, but "ugly" is catchier) from the experts.

Wednesday, Nov. 28 | 2:00 – 3:15 PM

Understanding Infrastructure Financing in 2019

Understanding the attributes of issuing debt in today's infrastructure environment is challenging. Knowing what questions to ask while deciding between private placement and public bonds is a key component. Understanding the differences between the various options and what solution is right for you is critical. In this joint finance/attorney program, attendees will hear from fellow water agencies, legal counsel, and an investment bank about their experience when it comes to issuing debt from project timelines, staff involvement, and costs of issuance.

Wednesday, Nov. 28 | 3:30 – 4:45 PM

Any Which Way You Can: Pension and OPEB Cost Reduction and Funding Options

Pension and OPEB costs and obligations are always in the forefront of financial planning and public scrutiny, and must be addressed any which way you can. Find out ways to address cost escalation and funding options from real-life success stories.

Thursday, Nov. 29 | 9:30 – 11:00 AM

A Fistful of Dollars: Reserve Policy and Understanding Risks

Water agencies across California are re-evaluating their reserve policies in an effort to determine the type of reserve best suited for their agency and the funding level for their selected reserve. The water business is by nature a highly capital-intensive service that faces potential revenue instability; thus, there is the requirement for a fitting and appropriately funded reserve. Individual water agencies exhibiting different risk profiles can be addressed by different reserve policies. This panel discussion will introduce why reserves are needed for a water agency, the types of reserves commonly implemented, when they are suitable, and their appropriate levels of funding.

LOCAL GOVERNMENT COMMITTEE PROGRAM

Wednesday, Nov. 28 | 3:30 – 4:45 PM

A Conversation Concerning Consolidation

The 2018 legislative year produced a number of bills regarding the consolidation of water and wastewater systems. Some of these legislative proposals would empower local governments while others would give additional authority to State agencies. While not all of these proposals moved forward a few significant measures will become law in 2019. This panel of experts will discuss the technical issues surrounding a consolidation of water and wastewater systems as well as the political implications of merging agencies and service areas.

WATER INDUSTRY TRENDS PROGRAMS

Wednesday, Nov. 28 | 10:00 – 11:30 AM

Regulating Urban Water System Leak Loss?

The State Water Resources Control Board (SWRCB) has been conducting a stakeholder process and is developing water loss performance standards for urban water agencies, as required by SB 555 (Wolk, 2015), now Water Code Section 10608.34. These performance standards will be proposed next spring and adopted by the end of 2019. The resulting standards will be customized for each agency in consideration of local cost effectiveness. And now, with the passage of new comprehensive water use efficiency/water conservation laws, retail water system leak loss will be a significant component of the water use efficiency targets for water agencies, including possible water loss rules for wholesale water agencies.

What are some of the policy and technical considerations that have been raised during the current stakeholder process? How will "custom" performance standards for water loss be used in establishing water use efficiency targets? How can these regulations be crafted to support local water agency system reliability and cost-effectiveness needs?

CONFERENCE PROGRAMS

Programs are subject to change without notice.

CONTINUED

WATER INDUSTRY TRENDS PROGRAMS

Wednesday, Nov. 28 | 3:30 – 4:45 PM

Desalination Operations: Filtering the Details

Come join this panel of desalination experts who are leading the way in California! Real-time operational examples will be showcased, including the Claude "Bud" Lewis Carlsbad Desalination Plant and Charles E. Meyer Santa Barbara Desalination Plant. The panelists will "filter the details" on how desalination connects with municipal water system management, the challenges of operating an integrated system, and what opportunities lay ahead for the future of desalination.

Thursday, Nov. 29 | 2:00 – 3:15 PM

Innovative Approaches to Watershed Collaboration

Learn how cross-watershed collaboration on complex multi-jurisdictional issues such as stormwater, urban runoff, and stranded wastewater treatment can lead to cost-effective data-driven solutions. An exciting project is kicking off to create a real-time water budget and salt balance in the Aliso Watershed to help reduce urban runoff through education and water efficiency programs, and potentially use excess wastewater treatment capacity for resource recovery.

STATEWIDE ISSUE FORUM

Wednesday, Nov. 28 | 10:00 – 11:30 AM

The Next Administration's Water Agenda – Viewpoints on What Should and Should Not be the Course of Action

After ACWA wrote its Statewide Water Action Plan, the Brown Administration developed the *California Water Action Plan*, which calls for a comprehensive approach to water. This plan helped lead to Proposition 1, with $2.7 billion for storage and other water funding, and enactment of the Sustainable Groundwater Management Act, among other water policy initiatives. What steps should the next Administration take and not take? With the swearing in of the next Governor just weeks away, this diverse panel of thought leaders from the agricultural, environmental, labor and water communities will provide viewpoints about what the next Administration should do and not do on water and on other priority issues for their organizations.

Wednesday, Nov. 28 | 2:00 – 3:15 PM

Groundwater Recharge: Identifying and Removing the Barriers

One of the ACWA Board's strategic policy priorities is to identify strategies to increase groundwater sustainability and replenishment. A key element is identifying and removing barriers to greater groundwater recharge. This is a high priority that is shared by agricultural and urban water agencies and many other stakeholders, and there have been high-profile legislative and administrative efforts to get action on this priority. A key emerging strategy is a streamlined method to capture peak flood flows during atmospheric river events and move water efficiently into groundwater storage without injury to downstream users or the environment.

This program will offer a glimpse of the current situation, focusing on a promising development, a "Streamlined Groundwater Permitting Process for Diversions of High Flows to Underground Storage," which is being developed by the State Water Resources Control Board. The program will also unpack other promising developments and identify barriers that remain.

Wednesday, Nov. 28 | 3:30 – 4:45 PM

Making Water Use Data and Technology a California Way of Life?

The new water conservation laws mark a fundamental shift from efforts to impose percentage-based reductions in baseline water use to a water use efficiency framework based on water use budgets (or "objectives") for each urban water supplier to be calculated based on actual water needs and state standards. But there are several implementation details which remain to be determined.

Many agencies learned valuable lessons in how to achieve significant water use reductions, at least temporarily, during the recent drought. Some agencies have been implementing innovative programs using advanced technology tools and modern data resources to improve water use efficiency over the longterm. Those efforts have produced some successes and some failures, which should inform our collective efforts to "Make Water Conservation a California Way of Life."

This panel presentation will offer a discussion of some of those technological tools and the lessons that have been learned about how they can be made valuable for water agencies and for the State in the context of the new legislative mandates.

CONFERENCE PROGRAMS

State Water Resources Control Board Drinking Water Contact Hours may be available for qualifying programs.

Thursday, Nov. 29 | 9:30 – 11:00 AM

A Pathway to Voluntary Agreements in the Bay-Delta: Local Solutions and Lessons Learned

The State Water Board is expected to adopt proposed changes to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan) this year, which will establish new water quality objectives for the San Joaquin and Sacramento Rivers and their tributaries. This program will explore how communities are cultivating common ground among diverse stakeholders to develop locally based, collaborative solutions for managing rivers. Panelists will share how local solutions can become voluntary settlement agreements that result in habitat and other non-flow improvements in the Bay-Delta.

Thursday, Nov. 29 | 2:00 – 3:15 PM

Safe and Affordable Drinking Water - Can the State and Stakeholders Collaborate and Reach Consensus?

State law sets forth the policy of the human right to safe and affordable water. The issue of appropriate funding solutions has led to very different views amongst stakeholders who are active at the Capitol. The State budget now includes funding for a needs analysis. Could 2019 be the year when the State and stakeholders come together? Come hear from key thought leaders in this area.

At the same time, the State Water Resources Control Board is developing the AB 401 (Dodd, 2015) plan for a low income water rate assistance program. If authorized by subsequent legislation, this water affordability program could result in subsidies for as many as one-third of the households in California. Major issues for the plan include the program scope, assistance level, assistance delivery mechanism and program funding source. This panel will inform ACWA members about the State Water Board's latest thinking on the development of a plan that could have a major impact on water affordability.

Check the ACWA website for updated conference information.
WWW.ACWA.COM

REGIONAL ISSUES

Wednesday, Nov. 28 | 10:00 – 11:30 AM

Potable Reuse: Nuts and Bolts

ACWA Region 8 invites you to a program highlighting local water reuse. During this program you will learn about local direct and indirect potable water reuse projects in different stages of development. You will also hear about the regulatory issues to take into consideration when moving forward with a local water reuse project.

Wednesday, Nov. 28 | 2:00 – 3:15 PM

Functional Flows: Fins, Feathers, Furs and Farms

Region 2 is hosting a program that will explore water supply implications that result from managing the landscape more effectively to facilitate an ecologically functioning aquatic food web to help restore productive river and delta ecosystems. Attendees will learn about specific fish food projects that are currently being implemented to aid fish populations and create a more consistent and stable water supply.

Thursday, Nov. 29 | 9:30 – 11:00 AM

Cultivating Your Future Water Workforce - Relationships & Apprenticeships

California water agencies continue to face increasing shortages of water industry professionals to backfill a record number of retirements. Apprenticeship and internship programs can help train skilled workers to fill the gap. These career specific programs can have a multi-pronged approach starting in high school level internships through full apprenticeships. Attend this session about two specific partnerships that ACWA Region 5 member agencies formed to address workforce shortages. Through these regional partnerships water agencies have developed apprenticeship programs leading to skills in machinist, plant maintenance mechanic, instrument technician and plant operator classifications, in which participants come away with a guaranteed job upon completion and serve as program ambassadors for recruitment into the program. Discover how these partnerships can be created to benefit your district today, tomorrow, and for years to come.

CONFERENCE AGENDA

ACWA JPIA - MONDAY, NOV. 26

8:30 – 10:00 AM
- ACWA JPIA Program Committee

10:15 – 11:15 AM
- ACWA JPIA Executive Committee

1:30 – 4:00 PM
- ACWA JPIA Board of Directors

4:00 – 5:00 PM
- ACWA JPIA Town Hall

5:00 – 6:00 PM
- ACWA JPIA Reception

TUESDAY, NOV. 27

8:00 AM – 9:45 AM
- Agriculture Committee

8:00 AM – 6:00 PM
- Registration

8:30 AM – Noon
- ACWA JPIA Seminars

9:00 AM – 4:00 PM
- ACWA Legal Briefing & CLE Workshop Presented by Downey Brand LLP

10:00 – 11:45 AM
- Groundwater Committee
- Local Government Committee

11:00 AM – Noon
- Outreach Task Force

Noon – 2:00 PM
- ACWA 101 & Luncheon
- Committee Lunch Break

1:00 – 2:45 PM
- Energy Committee
- Finance Committee
- Scholarship & Awards Subcommittee
- Water Management Committee

1:30 – 3:30 PM
- ACWA JPIA: Sexual Harassment Prevention for Board Members & Managers (AB 1825)

3:00 – 4:45 PM
- Communications Committee
- Federal Affairs Committee
- Membership Committee
- Water Quality Committee

5:00 – 6:30 PM
- Welcome Reception in the Exhibit Hall

WEDNESDAY, NOV. 28

7:30 AM – 5 PM
- Registration

8:00 – 9:45 AM
- Opening Breakfast *(Ticket Required)*

8:30 AM – Noon & 1:30 – 6:00 PM
- Exhibit Hall

10:00 – 11:30 AM
- Attorneys Program
- Energy Committee Program
- Exhibitor Demos
- Finance Program
- Region Issue Forum
- Statewide Issue Forum
- Water Industry Trends Program

11:30 – 11:45 AM
- Networking in the Exhibit Hall

11:45 AM – 1:45 PM
- General Session Luncheon *(Ticket Required)*

2:00 – 3:15 PM
- Attorney/Finance Joint Program
- Communications Committee Program
- Energy Committee Program
- Exhibitor Case Study
- Region Program
- Statewide Issue Forum
- Water Industry Trends Program

3:30 – 4:45 PM
- Aquatic Resources Subcommittee
- Exhibitor Case Study
- Finance Program
- Local Government Committee
- Statewide Issue Forums
- Water Industry Trends Program

3:30 – 5:30 PM
- Legal Affairs Committee

5:00 – 6:00 PM
- Prize Drawing Fiesta Night in the Exhibit Hall

5:30 – 7:00 PM
- CalDesal Hosted Mixer
- Jacobs Hosted Reception

THURSDAY, NOV. 29

7:30 AM – 4 PM
- Registration

7:45 – 9:15 AM
- Regions 1–5 Membership Meetings

8:00 AM – Noon
- Exhibit Hall

8:00 – 9:15 AM
- Networking Continental Breakfast, Exhibit Hall *(Ticket Required)*

9:30 – 11:00 AM
- Attorneys Program
- Exhibitor Demos
- Finance Program
- Region Issue Forum
- Statewide Issue Forum

9:30 - 11:45 AM
- Ethics Training (AB 1234) - *Limited Seating*

11:00 – 11:30 AM
- Prize Drawings in the Exhibit Hall

11:45 AM – 1:45 PM
- General Session Luncheon *(Ticket Required)*

2:00 – 3:15 PM
- Attorneys Program
- Exhibitor Case Studies
- Federal Issues Forum
- Statewide Issue Forum
- Water Industry Trends Program

3:30 – 5 PM
- Regions 6–10 Membership Meetings

6:00 – 7:00 PM
- Reception

7:00 – 10:00 PM
- Dinner & Entertainment *(Ticket Required)*

FRIDAY, NOV. 30

8:00 – 9:30 AM
- Registration

8:30 – 10:00 AM
- ACWA's Hans Doe Past Presidents' Breakfast in Partnership with ACWA JPIA *(Ticket Required)*

OTHER EVENTS

TUESDAY, NOV. 27

7:00 AM – 4 PM
- ACWA Fall Conference Golf Tournament

THURSDAY, NOV. 29

6:45 – 8:30 AM
- San Joaquin Valley Agricultural Water Committee

All conference programs are subject to change.

ACWA
Association of California Water Agencies

ACWA 2018 Fall Conference & Exhibition

November 27 - 30, 2018 | Manchester Grand Hyatt San Diego

REGISTRATION TERMS & CONDITIONS

WHO IS ELIGIBLE FOR "ACWA ADVANTAGE" PRICING?

ACWA Advantage pricing is available to the following registrants:

- An officer or director of an ACWA member agency.
- A person directly employed by an ACWA public agency member, affiliate or associate organization. This does not include independent contractors, service providers, or third-party vendors.
- Any ACWA board member whose fee is paid for by member agency.
- Any state or federal administrative or legislative personnel in elected, appointed or staff positions.
- Staff of ACWA/JPIA and Water Education Foundation.
- Any individual or honorary life member of ACWA.

MEMBERSHIP INFORMATION - *Become a Member & Save on ACWA Events*

If you are interested in learning more about becoming an ACWA Associate, contact Ashley Kravchuk at AshleyK@acwa.com. For public agency membership, please contact Tiffany Giammona at TiffanyG@acwa.com.

CANCELLATIONS & CHANGES

All registration changes and cancellations must be made in writing by the event registration deadline. Valid cancellation requests will receive a refund of any registration fees paid minus a $75 processing charge. For payments originally made by credit card, refunds can be issued back onto the credit card within 60 days. Otherwise, a refund will be issued by check. No refunds or registration changes will be granted after the registration deadline. Submit request in writing to Teresa Taylor at TeresaT@acwa.com.

SUBSTITUTIONS

Event registrations are transferable from one participant to another within the same organization. Please submit your request in writing before the event registration deadline to Teresa Taylor at TeresaT@acwa.com. Include the original registrant's name, the new person's name, title and email address with your request. After the registration deadline, substitutions will be handled on-site. Only one substitution is permitted per original registrant. The individual submitting the substitution request is responsible for all financial obligations (including any balance due) associated with the original registration. There is no fee to transfer an eligible registration.

SPECIAL REQUESTS & ACCOMMODATIONS

Special requests must be submitted in writing to Teresa Taylor at TeresaT@acwa.com. Participants are encouraged to submit changes and special requests as soon as possible. If you have a disability that requires an accommodation, please contact Teresa Taylor at TeresaT@acwa.com or call toll free at (888) 666-2292 to discuss your needs.

REFUNDS

Except as otherwise provided in this document, all payments and fees are nonrefundable after the registration deadline.

MEAL TICKETS

After the registration deadline, meal tickets are not eligible for exchange, refund or credit after the event registration deadline.

NONATTENDANCE

Registrants who fail to attend the event, in part or in whole, are not eligible for a refund or credit and will be billed for any balance due.

GUEST REGISTRATION

Guest registration is available to a spouse, companion or guest of an ACWA event registrant. Guest registration is not available to any employees of a public agency, associate or affiliate/mutual water company. Guest registration is also not available to anyone with a professional reason to attend for purposes of learning or business. The guest registration includes admission to the receptions and the ability to purchase meal tickets and attend meal functions.

CONSENT

Registration and attendance at, or participation in, this event constitutes an agreement by the registrant to ACWA's use and distribution (both now and in the future) of the registrant's name, title, organization and mailing address as well as the registrant's image or voice in photographs, videotapes, electronic reproductions and audiotapes.

ACWA 2018 Fall Conference & Exhibition

November 27 - 30, 2018 | Manchester Grand Hyatt San Diego

REGISTRATION, MEALS AND HOTEL PRICING SHEET

REGISTER ONLINE

Register online by **November 9, 2018** at **www.acwa.com** to take advantage of the advance pricing.

REGISTER ON SOMEONE'S BEHALF

Select from a list of people affiliated with your company in your account. If the registrant is not listed, you will need to create a Portal profile for the registrant before registering.

REGISTRATION OPTIONS *Advantage pricing applies to ACWA public agency members, associates & affiliates.* *Standard pricing applies to non-members of ACWA.*	ADVANCE DEADLINE: 11/9/18		ONSITE	
	ADVANTAGE	STANDARD	ADVANTAGE	STANDARD
Full Conference Registration & Meals Package	$699	N/A	N/A	N/A
Full Conference Registration Only (meals sold separately)	$555	$830	$575	$850
One-Day Conference Registration (meals sold separately) **Wednesday:** Registration includes Welcome Reception on Tuesday evening **–OR–** **Thursday:** Registration includes ability to purchase a ticket for Friday breakfast	$320	$470	$340	$490
Guest Conference Registration (meals sold separately) Guest registration is not available to anyone with a professional reason to attend.	$45	$45	$45	$45

MEAL FUNCTIONS	ADVANCE	ONSITE
Wednesday Opening Breakfast - November 28	$45	$50
Wednesday Luncheon - November 28	$50	$55
Thursday Networking Continental Breakfast - November 29	$35	$40
Thursday Luncheon - November 29	$50	$55
Thursday Dinner - November 29	$65	$70
Friday Breakfast - November 30	$45	$50

HOTEL INFORMATION

You must be registered for the ACWA conference in order to receive hotel reservation information and conference special room rate. **Conference special rate is available August 20 - November 5**, based on availability.

HOTEL
Manchester Grand Hyatt San Diego
1 Market Place, San Diego, CA 92101

ROOM RATES
Single/Double $199 per night*

* Subject to the following taxes & fees:
2.0% SD TMD, $0.65 CA Tourism Assessment Fee and 10.5% Occupancy Tax

Deadline for group rate is November 5, 2018

IMPORTANT DATES
For those **registering for conference prior to August 20**, hotel information will be provided via e-mail on August 20.

For those registering for conference from **August 20 to November 5**, your confirmation e-mail will include hotel reservation information and an opportunity to receive a conference special hotel rate.

QUESTIONS?
Contact us at (888) 666-2292

Cancellation deadline: November 9, 2018 4:30 p.m. (PST)
Conference terms and conditions available at acwa.com in the event section.

ASSOCIATION OF CALIFORNIA WATER AGENCIES

2018 Fall Conference Golf Tournament

Tuesday, November 27, 2018 • The Vineyard at Escondido Golf Course

SPONSORED BY

DELOACH & ASSOCIATES, INC

NBS helping communities fund tomorrow

ENTER TO PLAY >> WWW.ACWA.COM

TAKE A TOUR OF THE CARLSBAD DESALINATION PLANT

Friday, Nov. 30, 2018 | 10:30 AM *(meet in hotel lobby)*

You are invited to visit the largest, most technically advanced and environmentally sound desalination plant in the western hemisphere! At the Claude "Bud" Lewis Carlsbad Desalination Plant you will have the opportunity to observe the state of the art process of turning water from the Pacific Ocean into high quality drinking water that is now serving nearly a half a million San Diegans. You will also be able sample this new water supply right from source.

Long-pants and closed-toe shoes with NO HIGH HEELS are required. All other safety gear will be provided to you upon arrival. You must have a photo ID on you at all times and this will be checked upon arrival. Please keep in mind that the tour requires almost a ½ mile of walking and there are no opportunities to sit. There are also some stairs to climb and uneven surfaces throughout the plant. ***YOU MAY NOT CARRY A PURSE, BAG OR BACKPACK ON THE TOUR WITH YOU. Please leave these personal items on the bus.***

FOR QUESTIONS, PLEASE CONTACT:

Jessica H. Jones
Director of Communications, Poseidon Water
jjones@poseidon1.com
Direct: 760-655-3998

EVENT PARTNERS

San Diego County Water Authority

POSEIDON WATER

Director Comments

Yucaipa Valley Water District

Adjournment

Yucaipa Valley Water District

Yucaipa Valley Water District

FACTS ABOUT THE YUCAIPA VALLEY WATER DISTRICT

Service Area Size: 40 square miles (sphere of influence is 68 square miles)

Elevation Change: 3,140 foot elevation change (from 2,044 to 5,184 feet)

Number of Employees:
5 elected board members
71 full time employees

FY 2018-19 Operating Budget:
Water Division - $14,150,445
Sewer Division - $12,337,754
Recycled Water Division - $1,293,270
Total Annual Budget - $25,754,750

Number of Services:
12,693 water connections serving 17,362 units
13,980 sewer connections serving 21,806 units
92 recycled water connections

Water System:
215 miles of drinking water pipelines
27 reservoirs - 34 million gallons of storage capacity
18 pressure zones
12,000 ac-ft annual water demand (3.9 billion gallons)
Two water filtration facilities:
- 1 mgd at Oak Glen Surface Water Filtration Facility
- 12 mgd at Yucaipa Valley Regional Water Filtration Facility

Sewer System:
8.0 million gallon treatment capacity - current flow at 4.0 mgd
205 miles of sewer mainlines
5 sewer lift stations
4,500 ac-ft annual recycled water prod. (1.46 billion gallons)

Recycled Water:
22 miles of recycled water pipelines
5 reservoirs - 12 million gallons of storage
1,200 ac-ft annual recycled demand (0.4 billion gallons)

Brine Disposal:
2.2 million gallon desalination facility at sewer treatment plant
1.756 million gallons of Inland Empire Brine Line capacity
0.595 million gallons of treatment capacity in Orange County

Typical Rates, Fees and Charges:

- Drinking Water Commodity Charge:

1,000 gallons to 15,000 gallons	$1.429 per each 1,000 gallons
16,000 gallons to 60,000 gallons	$1.919 per each 1,000 gallons
61,000 gallons to 100,000 gallons	$2.099 per each 1,000 gallons
101,000 gallons or more	$2.429 per each 1,000 gallons

- Recycled Water Commodity Charge:

1,000 gallons or more	$1.425 per each 1,000 gallons

- Water Meter Service Charge (Drinking Water or Recycled Water):

5/8” x 3/4” Water Meter	$14.00 per month
1” Water Meter	$23.38 per month
1-1/2” Water Meter	$46.62 per month

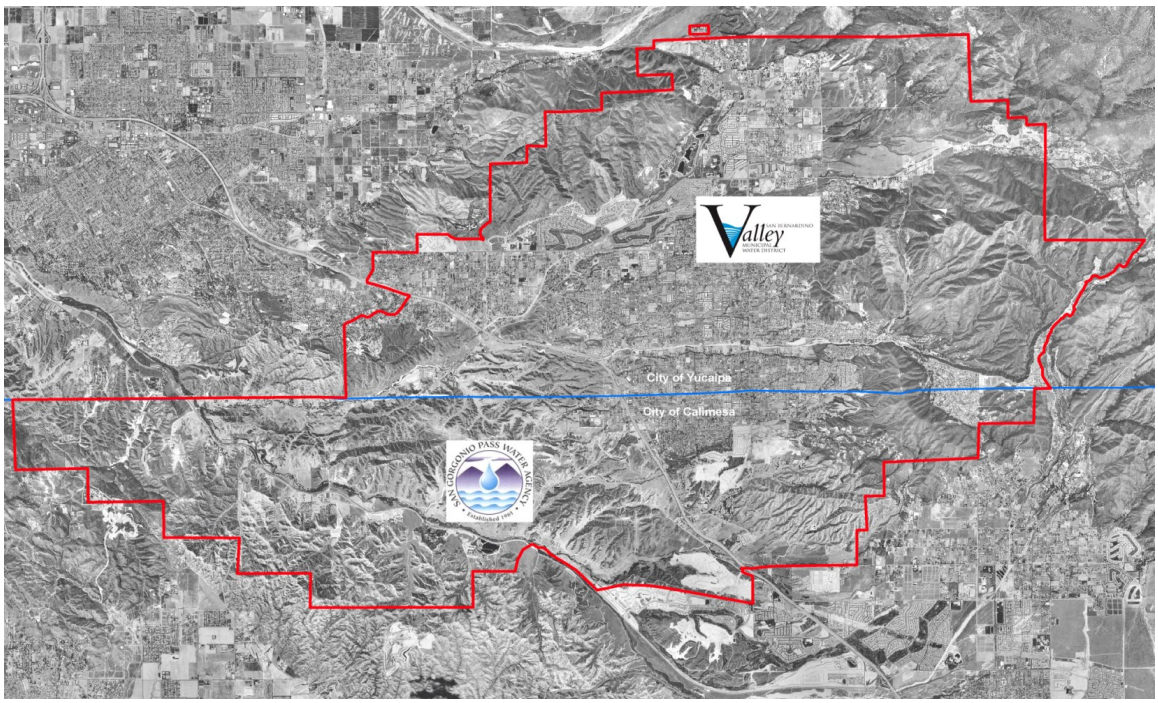
- Sewer Collection and Treatment Charge:

Typical Residential Charge	$42.43 per month

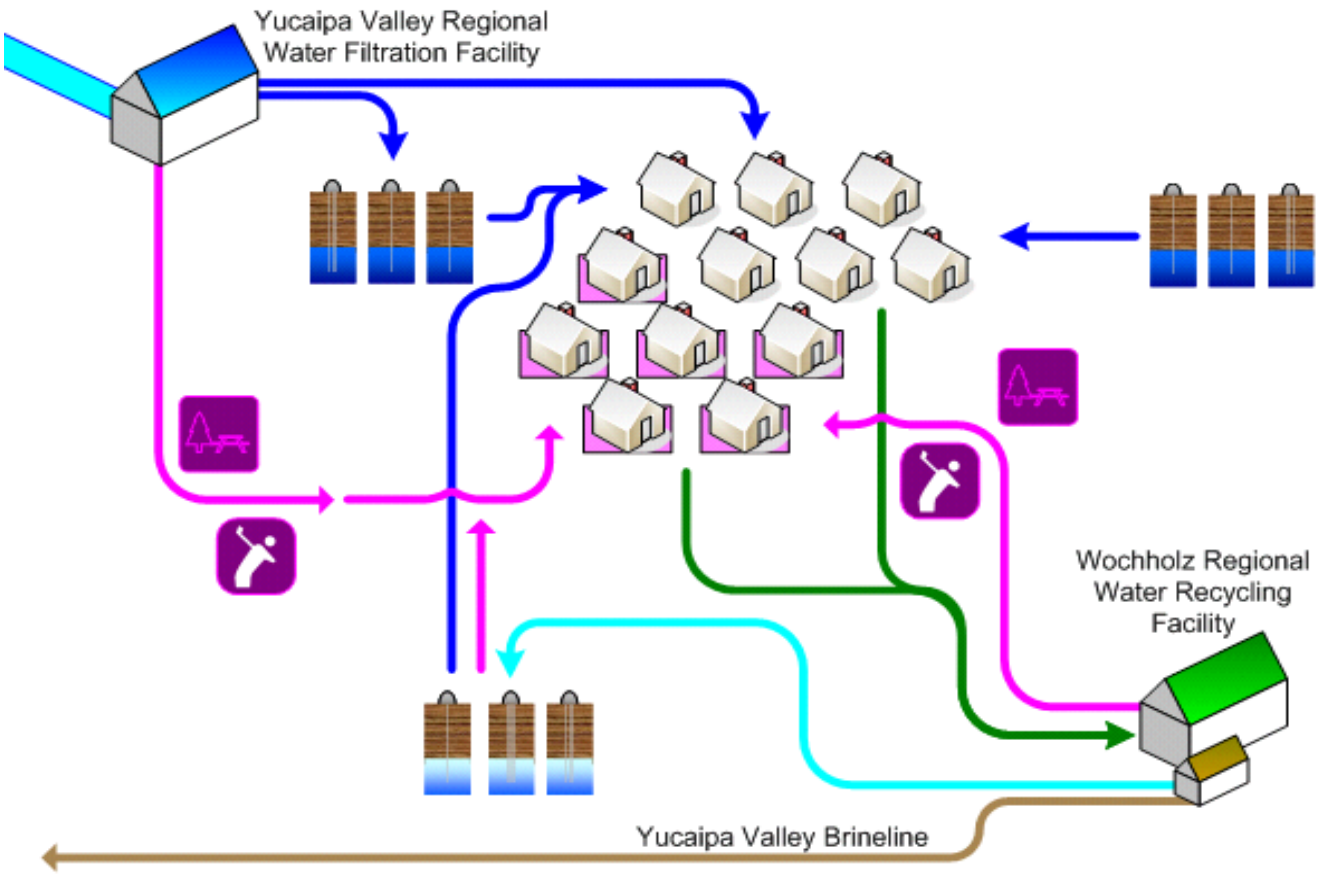
- Imported Water Charges (Pass-through State Water Project Charge):

San Bernardino Valley Municipal Water District	$0.27 per each 1,000 gallons
San Gorgonio Pass Water Agency	$0.66 per each 1,000 gallons

State Water Contractors: San Bernardino Valley Municipal Water District
San Gorgonio Pass Water Agency



Sustainability Plan: A Strategic Plan for a Sustainable Future: The Integration and Preservation of Resources, adopted on August 20, 2008.



Yucaipa Valley Water District

GLOSSARY OF COMMONLY USED TERMS

Every profession has specialized terms which generally evolve to facilitate communication between individuals. The routine use of these terms tends to exclude those who are unfamiliar with the particular specialized language of the group. Sometimes jargon can create communication cause difficulties where professionals in related fields use different terms for the same phenomena.

Below are commonly used water terms and abbreviations with commonly used definitions. If there is any discrepancy in definitions, the District's Regulations Governing Water Service is the final and binding definition.

Acre Foot of Water - The volume of water (325,850 gallons, or 43,560 cubic feet) that would cover an area of one acre to a depth of 1 foot.

Activated-Sludge Process - A secondary biological wastewater treatment process where bacteria reproduce at a high rate with the introduction of excess air or oxygen and consume dissolved nutrients in the wastewater.

Annual Water Quality Report - The document is prepared annually and provides information on water quality, constituents in the water, compliance with drinking water standards and educational material on tap water. It is also referred to as a Consumer Confidence Report (CCR).

Aquifer - The natural underground area with layers of porous, water-bearing materials (sand, gravel) capable of yielding a supply of water; see Groundwater basin.

Backflow - The reversal of water's normal direction of flow. When water passes through a water meter into a home or business it should not reverse flow back into the water mainline.

Best Management Practices (BMPs) - Methods or techniques found to be the most effective and practical means in achieving an objective. Often used in the context of water conservation.

Biochemical Oxygen Demand (BOD) - The amount of oxygen used when organic matter undergoes decomposition by microorganisms. Testing for BOD is done to assess the amount of organic matter in water.

Biosolids - Biosolids are nutrient rich organic and highly treated solid materials produced by the wastewater treatment process. This high-quality product can be recycled as a soil amendment on farm land or further processed as an earth-like product for commercial and home gardens to improve and maintain fertile soil and stimulate plant growth.

Capital Improvement Program (CIP) - Projects for repair, rehabilitation, and replacement of assets. Also includes treatment improvements, additional capacity, and projects for the support facilities.

Certificate of Participation (COP) – A type of financing where an investor purchases a share of the lease revenues of a program rather than the bond being secured by those revenues.

Coliform Bacteria - A group of bacteria found in the intestines of humans and other animals, but also occasionally found elsewhere used as indicators of sewage pollution. E. coli are the most common bacteria in wastewater.

Collections System - In wastewater, it is the system of typically underground pipes that receive and convey sanitary wastewater or storm water.

Conjunctive Use - The coordinated management of surface water and groundwater supplies to maximize the yield of the overall water resource. Active conjunctive use uses artificial recharge, where surface water is intentionally percolated or injected into aquifers for later use. Passive conjunctive use is to simply rely on surface water in wet years and use groundwater in dry years.

Consumer Confidence Report (CCR) - see Annual Water Quality Report.

Contaminants of Potential Concern (CPC) - Pharmaceuticals, hormones, and other organic wastewater contaminants.

Cross-Connection - The actual or potential connection between a potable water supply and a non-potable source, where it is possible for a contaminant to enter the drinking water supply.

Disinfection by-Products (DBPs) - The category of compounds formed when disinfectants in water systems react with natural organic matter present in the source water supplies. Different disinfectants produce different types or amounts of disinfection byproducts. Disinfection byproducts for which regulations have been established have been identified in drinking water, including trihalomethanes, haloacetic acids, bromate, and chlorite

Drought - a period of below average rainfall causing water supply shortages.

Fire Flow - The ability to have a sufficient quantity of water available to the distribution system to be delivered through fire hydrants or private fire sprinkler systems.

Gallons per Capita per Day (GPCD) - A measurement of the average number of gallons of water use by the number of people served each day in a water system. The calculation is made by dividing the total gallons of water used each day by the total number of people using the water system.

Groundwater Basin - An underground body of water or aquifer defined by physical boundaries.

Groundwater Recharge - The process of placing water in an aquifer. Can be a naturally occurring process or artificially enhanced.

Hard Water - Water having a high concentration of minerals, typically calcium and magnesium ions.

Hydrologic Cycle - The process of evaporation of water into the air and its return to earth in the form of precipitation (rain or snow). This process also includes transpiration from plants, percolation into the ground, groundwater movement, and runoff into rivers, streams, and the ocean; see Water cycle.

Levels of Service (LOS) - Goals to support environmental and public expectations for performance.

Mains, Distribution - A network of pipelines that delivers water (drinking water or recycled water) from transmission mains to residential and commercial properties, usually pipe diameters of 4" to 16".

Mains, Transmission - A system of pipelines that deliver water (drinking water or recycled water) from a source of supply the distribution mains, usually pipe diameters of greater than 16".

Meter - A device capable of measuring, in either gallons or cubic feet, a quantity of water delivered by the District to a service connection.

Overdraft - The pumping of water from a groundwater basin or aquifer in excess of the supply flowing into the basin. This pumping results in a depletion of the groundwater in the basin which has a net effect of lowering the levels of water in the aquifer.

Pipeline - Connected piping that carries water, oil, or other liquids. See Mains, Distribution and Mains, Transmission.

Point of Responsibility, Metered Service - The connection point at the outlet side of a water meter where a landowner's responsibility for all conditions, maintenance, repairs, use and replacement of water service facilities begins, and the District's responsibility ends.

Potable Water - Water that is used for human consumption and regulated by the California Department of Public Health.

Pressure Reducing Valve - A device used to reduce the pressure in a domestic water system when the water pressure exceeds desirable levels.

Pump Station - A drinking water or recycled water facility where pumps are used to push water up to a higher elevation or different location.

Reservoir - A water storage facility where water is stored to be used at a later time for peak demands or emergencies such as fire suppression. Drinking water and recycled water systems will typically use concrete or

steel reservoirs. The State Water Project system considers lakes, such as Shasta Lake and Folsom Lake to be water storage reservoirs.

Runoff - Water that travels downward over the earth's surface due to the force of gravity. It includes water running in streams as well as over land.

Santa Ana River Interceptor (SARI) Line - A regional brine line designed to convey 30 million gallons per day (MGD) of non-reclaimable wastewater from the upper Santa Ana River basin to Orange County Sanitation District for treatment, use and/or disposal.

Secondary treatment - Biological wastewater treatment, particularly the activated-sludge process, where bacteria and other microorganisms consume dissolved nutrients in wastewater.

Service Connection - The water piping system connecting a customer's system with a District water main beginning at the outlet side of the point of responsibility, including all plumbing and equipment located on a parcel required for the District's provision of water service to that parcel.

Sludge - Untreated solid material created by the treatment of wastewater.

Smart Irrigation Controller - A device that automatically adjusts the time and frequency which water is applied to landscaping based on real-time weather such as rainfall, wind, temperature, and humidity.

South Coast Air Quality Management District (SCAQMD) - Regional regulatory agency that develops plans and regulations designed to achieve public health standards by reducing emissions from business and industry.

Special district - A form of local government created by a local community to meet a specific need. Yucaipa Valley Water District is a County Water District formed pursuant to Section 30000 of the California Water Code

Supervisory Control and Data Acquisition (SCADA) - A computerized system which provides the ability to remotely monitor and control water system facilities such as reservoirs, pumps, and other elements of water delivery.

Surface Water - Water found in lakes, streams, rivers, oceans, or reservoirs behind dams. In addition to using groundwater, Yucaipa Valley Water District receives surface water from the Oak Glen area.

Sustainable Groundwater Management Act (SGMA) - Pursuant to legislation signed by Governor Jerry Brown in 2014, the Sustainable Groundwater Management Act requires water agencies to manage groundwater extractions to not cause undesirable results from over production.

Transpiration - The process by which water vapor is released into the atmosphere by living plants.

Trickling filter - A biological secondary treatment process in which bacteria and other microorganisms, growing as slime on the surface of rocks or plastic media, consume nutrients in wastewater as it trickles over them.

Underground Service Alert (USA) - A free service (https://www.digalert.org) that notifies utilities such as water, telephone, cable and sewer companies of pending excavations within the area (dial 8-1-1 at least 2 working days before you dig).

Urban runoff - Water from city streets and domestic properties that carry pollutants into the storm drains, rivers, lakes, and oceans.

Valve - A device that regulates, directs, or controls the flow of water by opening, closing or partially obstructing various passageways.

Wastewater - Any water that enters the sanitary sewer.

Water Banking - The practice of actively storing or exchanging in-lieu surface water supplies in available groundwater basin storage space for later extraction and use by the storing party or for sale or exchange to a third party. Water may be banked as an independent operation or as part of a conjunctive use program.

Water Cycle - The continuous movement water from the earth's surface to the atmosphere and back again.

Water Pressure - Water pressure is created by the weight and elevation of water and/or generated by pumps that deliver water to customers.

Water Service Line - A water service line is used to deliver water from the Yucaipa Valley Water District's mainline distribution system.

Water table - the upper surface of the zone of saturation of groundwater in an unconfined aquifer.

Water transfer - a transaction, in which a holder of a water right or entitlement voluntarily sells/exchanges to a willing buyer the right to use all or a portion of the water under that water right or entitlement.

Watershed - A watershed is the region or land area that contributes to the drainage or catchment area above a specific point on a stream or river.

Water-Wise House Call - a service which provides a custom evaluation of a customer's indoor and outdoor water use and landscape watering requirements.

Well - a hole drilled into the ground to tap an underground aquifer.

Wetlands - lands which are fully saturated or under water at least part of the year, like seasonal vernal pools or swamps.

Yucaipa Valley Water District

COMMONLY USED ABBREVIATIONS

AQMD	Air Quality Management District
BOD	Biochemical Oxygen Demand
CARB	California Air Resources Board
CCTV	Closed Circuit Television
CWA	Clean Water Act
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FOG	Fats, Oils, and Grease
GPD	Gallons per day
MGD	Million gallons per day
O & M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
POTW	Publicly Owned Treatment Works
PPM	Parts per million
RWQCB	Regional Water Quality Control Board
SARI	Santa Ana River Inceptor
SAWPA	Santa Ana Watershed Project Authority
SBVMWD	San Bernardino Valley Municipal Water District
SCADA	Supervisory Control and Data Acquisition system
SSMP	Sanitary Sewer Management Plan
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
WDR	Waste Discharge Requirements
YVWD	Yucaipa Valley Water District